

CONFIGURATIONS

A BI-ANNUAL NEWSLETTER

Department of Computer Science & Engineering

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CSE

COMPUTER SCIENCE & ENGINEERING

St. Ann's College of Engineering & Technology
(Autonomous)

Chirala – 523 187, Bapatla District

Approved by AICTE – New Delhi, Permanantly Affiliated to JNTUK- Kakinada

Accredited by NBA and Institution of Engineers(INDIA)

Institution Accredited by NAAC with 'A' Grade

Recognised by UGC under Section 2(f) & 12(B) of UGC Act, 1956

Awarded 'A' Grade by Andhra Pradesh State Government.

<u>VISION</u>	<u>MISSION</u>
To be a centre of excellence in Computer Science & Engineering, and to produce students with ability to address emerging challenges in global perspective with social concern.	• To impart quality education that builds strong computational knowledge and prepares students for global technological demands. • To develop analytical, design, and research capabilities enabling students to create innovative and sustainable engineering solutions. • To promote experiential learning through projects, internships, and hands-on exposure to modern tools and technologies. • To nurture responsible engineers with ethical values, societal awareness, and a commitment to inclusive technological growth. • To encourage participation in research, consultancy, and community-oriented initiatives that enhance societal impact. • To encourage continuous professional growth by fostering adaptability, curiosity, and lifelong learning habits

Message from HOD's Desk

It gives me immense pleasure to present the first edition of our departmental newsletter "*Configurations*" for the year 2025. This publication reflects the **dedication** and **sincere efforts** of our **students and faculty** in building a **vibrant academic environment**.



In today's **rapidly evolving technological landscape**, success depends on **adaptability**, **innovation**, and **sincerity**. I encourage everyone to embrace **hard work** with **consistency** and continuously upgrade their skills to keep pace with emerging fields such as **Artificial Intelligence**, **Data Science**, **Cybersecurity**, and **Cloud Computing**.

On this occasion, I extend my heartfelt greetings to all on **Republic Day**. May it inspire us to uphold **unity**, **integrity**, and **excellence** in all our endeavours. Let us move forward together with **dedication** and **purpose**.

With best regards,

Dr. P. Harini, Ph.D.

Professor & Head of the Department

Department of Computer Science & Engineering

St. Ann's College of Engineering & Technology, Chirala.

BEST COMPLIMENTS FROM



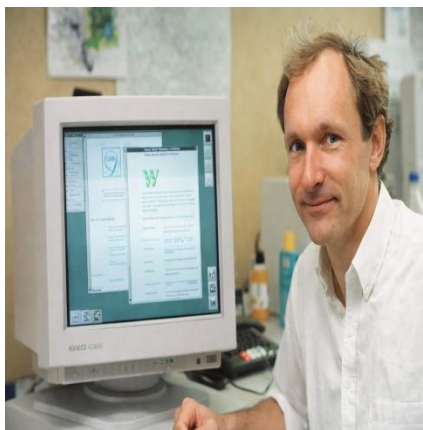
Sri. V. Ramakrishna Rao
Secretary



Sri. S. Lakshmana Rao
Correspondent



Dr. K. Jagadeesh Babu
Principal

St. Ann's College of Engineering & Technology :: Chirala	
<u>Contents</u> 1. Program Educational Objectives (PEOs) 2. Program Specific Outcomes (PSOs) 3. Program Outcomes (POs) 4. Faculty Development Programs 5. Faculty Publications 6. Student Workshops 7. Toppers 8. Placements 9. Student Corner: Tech Buzz 10. Student Corner: Puzzle Box 11. Humour Corner	<u>Program Educational Objectives (PEOs)</u> • PEO1: Apply fundamental knowledge and engineering principles to design, develop, test, and maintain reliable and efficient software systems that meet user and industry requirements. • PEO2: Build and implement software solutions to address needs in research, education, training, and e-governance, contributing to technological and societal advancement. • PEO3: Function effectively as professionals by working collaboratively in teams, using modern tools, standard development environments, and sound project management practices. • PEO4: Engage in lifelong learning, uphold ethical practices, enhance professional skills, and adapt proactively to evolving AI technologies and societal needs.
<u>QUOTE!</u>  “The Web does not just connect machines, it connects people.” — Sir Tim Berners-Lee (Inventor of World Wide Web at CERN – 1989)	<u>Program Specific Outcomes (PSOs)</u> • PSO1: Design, implement, and evaluate software solutions by applying core principles of algorithms, data structures, operating systems, and database technologies to meet specified functional and performance requirements. • PSO2: Analyze and develop intelligent computing systems using computational techniques in artificial intelligence, machine learning, data analytics, and cloud technologies to solve real-world problems. • PSO3: Architect, deploy, and manage secure and scalable computing environments by selecting appropriate tools, platforms, and frameworks for modern software development, networked systems, and enterprise applications.

Program Outcomes (POs)

- **PO1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **PO3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- **PO4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **PO5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **PO6. The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **PO7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **PO11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **PO12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

FACULTY Development PROGRAMS (FDPs)

Faculty Development Programs (FDPs) play a vital role in enhancing the academic and professional excellence of faculty members. The Department of Computer Science and Engineering actively engages in FDPs that reflect its commitment to continuous learning and innovation.

Our faculty participate in programs on emerging technologies such as **Generative AI, Cloud Computing, Deep Learning, and Innovative Teaching Practices**, enabling them to stay aligned with evolving industry trends and strengthen both technical and pedagogical skills.

These initiatives **highlight** the department's **dedication to academic growth, industry relevance, and excellence**.

Selective List of FDPs attended by the faculty

S.No	Name of the Faculty	Date(s)	Name of the Programme	Host Institution
1	Dr. P Harini	16-09-2024 to 20-09-2024	FDP on Gen-AI and Prompt Engineering Using Microsoft Co-Pilot	BNMIT, DY Patil ATU, Marwadi University & ExcelR
2	Dr. Yezarla Chittibabu	16-09-2024 to 20-09-2024	FDP on Gen-AI and Prompt Engineering Using Microsoft Co-Pilot	BNMIT, DY Patil ATU, Marwadi University & ExcelR
3	Dr. A. Tirupathaiah	16-09-2024 to 20-09-2024	FDP on Gen-AI and Prompt Engineering Using Microsoft Co-Pilot	BNMIT, DY Patil ATU, Marwadi University & ExcelR
4	Dr. Ratna Raju Mukiri	16-09-2024 to 20-09-2024	FDP on Gen-AI and Prompt Engineering Using Microsoft Co-Pilot	BNMIT, DY Patil ATU, Marwadi University & ExcelR
5	Dr. D. Nagesh Babu	16-09-2024 to 20-09-2024	FDP on Gen-AI and Prompt Engineering Using Microsoft Co-Pilot	BNMIT, DY Patil ATU, Marwadi University & ExcelR
6	Kurapati Devi Nagasri	16-09-2024 to 20-09-2024	FDP on Gen-AI and Prompt Engineering Using Microsoft Co-Pilot	BNMIT, DY Patil ATU, Marwadi University & ExcelR
7	Dr. Prasuna Grandhi	02-12-2024 to 06-12-2024	Advanced Technology Program on Cloud Computing	Wipro Talent Next
8	P. Sindhura	27-12-2024 to 31-12-2024	FDP on Deep Learning and Artificial Intelligence	APSSDC & ExcelR
9	Dr. P Harini	02-12-2024 to 07-12-2024	FDP on Innovative Teaching and Learning Pedagogy	Research Foundation of India

Faculty Publications

The Department continues to foster a strong culture of **research, innovation, and scholarly excellence**. During the academic period, faculty members made significant contributions to emerging domains such as **Artificial Intelligence, Machine Learning, Deep Learning, Cyber Security, Healthcare Analytics, Data Science, Agricultural Informatics, and Recommender Systems**.

Their research findings have been published in reputed **Scopus-indexed journals, UGC CARE journals, and peer-reviewed publications**, reflecting the department's commitment to advancing knowledge and addressing real-world challenges. The following publications highlight the diverse research interests and academic accomplishments of our faculty members.

Selective List of Publications

S.No	Author Name	Title of the Paper	Journal / Conference
1	Dr. P. Harini	Advanced Forest Fire Detection using Convolution Neural Network	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/68 [SCOPUS]
2	Dr. P. Harini	New Efficiency System for Brain Tumor Classification using Machine Learning Algorithm	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/70 [SCOPUS]
3	Dr. P. Harini	Electronic Health Record Stage Identification using Principal Component Analysis	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/73 [SCOPUS]
4	Dr. Y. Chitti Babu	New Assessment Prediction Model of Eclipse Reports Based Statistical Algorithms	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/62 [SCOPUS]
5	Dr. Y. Chitti Babu	New Comparative Analysis Based Cyber Security using Deep Reinforcement Learning	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/69 [SCOPUS]
6	Dr. A. Tirupathaiah	Advanced Data Analysis and Clustering Methods for Crop Yield Prediction using Artificial System	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/64 [SCOPUS]

7	Dr. A. Tirupathaiah	New Identification of Security Cyber Methods using Artificial Intelligence	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/74 [SCOPUS]
8	Dr. Grandhi Prasuna	A Comparative Study Of Machine Learning (ML) And Deep Learning (DL) Techniques For Predicting Stock Prices	<i>International Journal of Creative Research Thoughts (IJCRT)</i> https://ijcrt.org [UGC Approved]
9	Dr. Grandhi Prasuna	SAFETY ONLINE SHOPPING TECHNIQUES WITH DIFFERENTIAL DATA PRIVACY	<i>Industrial Engineering Journal</i> http://www.journal-iiie-india.com [UGC CARE]
10	Dr. M. Ratna Raju	Analysis of an Explainable Student Performance within Online System using Feature Engineering	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/75 [SCOPUS]
11	Dr. M. Ratna Raju	Create New Security and Detection Methods using Deep Learning Algorithm	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/65 [SCOPUS]
12	Dr. K. SubbaRao	Hybrid Solution to Cold-start Problem in Personalized MSME's Recommender System	<i>ISTE Journal</i> https://www.isteonline.in
13	Dr. Nagesh Babu Dasari	Advanced Weather Forecast Prediction Result using Artificial Neural Network	<i>Machine Intelligence Research</i> https://machineintelligenceresearchs.com/index.php/mir/article/view/71 [SCOPUS]
14	Mrs. Madhuri Draksharam	Advancements and Trends in Diabetic Retinopathy Analysis through Deep Learning	<i>Journal of Emerging Technologies and Innovative Research (JETIR)</i> https://www.jetir.org [UGC CARE]

The Department takes pride in the remarkable **research productivity and academic contributions** of its faculty members. These publications demonstrate a continued commitment to **quality research, interdisciplinary collaboration, technological innovation, and knowledge dissemination**.

The department remains dedicated to promoting a vibrant research ecosystem that encourages faculty to contribute to high-impact scholarly work, thereby enhancing the institution's reputation and supporting the advancement of science and technology.

Student Workshops

The Department organized a series of **student workshops and skill development programs** to enhance **technical knowledge, problem-solving skills, and industry readiness**. Conducted by experienced industry professionals, these programs provided practical exposure to **Cloud Computing, Full Stack Development, Artificial Intelligence, Data Structures & Algorithms, Technical Writing, and Interview Preparation**, helping students strengthen their professional competencies.



S.NO	Title	Offered By	Duration	Resource Person(s)	Designation
1	Cracking Coding Interviews	ExcelR	23-09-2024 to 05-10-2024	Mr. Satish	Multi Skill Trainer
2	Technical Paper Writing	TR Tech Solutions, Hyderabad	14-10-2024 to 19-10-2024	Ms. V. Lakshmi, Mr. P. UdayKiran	Senior Project Engineer, Project Engineer
3	AWS Cloud Computing	APSSDC	04-11-2024 to 23-11-2024	Mr. Gopi Raju	Technical Skill Trainer
4	Java Full Stack with React JS and AI	AICTE, Brain O Vision Solutions India Pvt. Ltd	16-12-2024 to 31-12-2024	Mr. Manikumar	Multi Skill Trainer
5	DSA Mastery with Java	ExcelR	09-01-2025 to 23-01-2025	Mr. M. Srinivasa Rao	Multi Skill Trainer

Guest Lectures

Guest lectures serve as an **effective platform** for **bridging the gap** between **academic learning** and **industry practices**. They provide students with **valuable insights** from experts, enabling them to gain **practical knowledge**, understand emerging technologies, and explore current industry trends. The Department of **Computer Science and Engineering** organized a series of guest lectures aimed at **enhancing** students' **technical competencies**, **industry awareness**, and **career readiness**.



S.No	Date	Title of the Guest Lecture	Resource Person & Designation	Target Students	Students Benefited
1	12-10-2024	AI Applications in Banking & Healthcare	Mr. B. Phanindra Technical Skill Trainer, Multi Skill Trainer	II, III & IV B.Tech	201
2	11-12-2024	Digital Marketing	Mr. N. Surendra Babu Digital Skill Trainer	III & IV B.Tech	193

Toppers

The CSE Department proudly recognizes the **outstanding academic achievements** of its students who have secured top positions in their respective semesters. Through their **dedication, perseverance, and commitment to excellence**, these students have demonstrated exemplary performance and set a benchmark for their peers.

I year 1 Sem

S. No	HTNO	Student Name	%
1	24F01A05G8	SHAIK ABDUL RIHAN	88.4
2	24F01A05I5	SYED NIHITHA BHANU	86.86
3	24F01A05E0	PATAN RASHIN	86.86
4	24F01A0509	ANNAPUREDDY SWATHI	86.35
5	24F01A0555	GANDI ASRITHA NAGA SAI	85.32

II year 1 Sem

S. No	HTNO	Student Name	%
1	23F01A0524	CHATRASI YAMINI	88
2	23F01A0534	DEVARAPALLI SARA	88
3	23F01A0516	BINGINENI LAVANYA	85.5
4	23F01A05G4	SAVANAM HEMAKSHI	85
5	23F01A0567	JAGARLAMUDI MANASA	82

III Year 1 Sem

S. No	HTNO	Student Name	%
1	22F01A0563	KARPOORAPU VANI PRIYA	86.92
2	22F01A0503	AKULA LAKSHMI PRIYANKA	86.92
3	22F01A05I5	VARDHANAPU SURYA PRAKASH	85.52
4	22F01A05A4	NASAKA LIKHITHA	85.52
5	22F01A0559	JAMPANI SUMASRI	84.83

IV Year 1 Sem

S. No	HTNO	Student Name	%
1	21F01A0523	BOKKISAM BHAVANA SREEJA	79.46
2	21F01A05F2	IMMADISETTY SWATHI	78.15
3	21F01A05J0	SURAGANI BINDU MANASA	78.15
4	21F01A05F6	KOLASANI SIVA MANIKANTA	78.15
5	21F01A05J6	YADAMA GOWRI SHANMUKHA PRIYA	78.15

Placements

The Department of **Computer Science and Engineering** is delighted to announce the encouraging progress of campus placements for the graduating batch **(2021–2025)**. The placement season has begun on a promising note, with students securing opportunities in reputed **multinational corporations and technology organizations**.

Through continuous **industry-oriented training, aptitude development programmes, coding practice sessions, and technical skill enhancement initiatives**, students have demonstrated their readiness to meet evolving industry demands.

Early Placement Achievements – Batch 2021–2025

S.No	Roll Number	Student Name	Company
1	21F01A0510	ASADI PRUDHVI	CAPGEMINI
2	21F01A0502	ADAPALA SAI TARUN	INFOSYS
3	21F01A0533	DEVARAKONDA JOSHNAVI	TCS
4	21F01A0513	AVVARU BHANU DEEPTHI	WIPRO
5	21F01A0560	LANKA SOWMYA SRI	HCLTECH
6	21F01A0556	KOLAMUDI HEMA AMRUTHA	TECH MAHINDRA
7	21F01A0514	BALLIKURAVA SALOMI	NEC
8	21F01A0505	ANAMANENI PRANATHI	HEXAWARE
9	21F01A0545	GOWRABATHUNI NAGA SAI CHARAN	INFOCEPTS
10	21F01A0584	PERALA SAI SWARUPA	TECH MAHINDRA
11	21F01A0553	KARETI SRIKANTH	TRICON
12	21F01A05B5	TAVVA SRAVYA SRI	TELEPERFORMANCE

The department congratulates the students on their early placement success in leading organizations such as **Capgemini, Infosys, TCS, Wipro, HCLTech, Tech Mahindra, NEC, and Hexaware**.

With **several recruitment drives scheduled in the forthcoming months**, the department looks forward to achieving **greater milestones and expanding career opportunities** for the graduating batch.

Student Corner: Tech Buzz



Kaggle: Learn Data Science Through Practice

With the growing importance of data-driven decision-making, hands-on experience is crucial for students. **Kaggle**, a platform by Google, provides a collaborative environment for learning data science, machine learning, and analytics.

Kaggle offers datasets, coding notebooks, and competitions that allow students to practice real-world problems. It supports Python and R programming, enabling users to build models, analyze data, and share insights. The platform also hosts community discussions and tutorials, making learning interactive and practical.

Beyond competitions, Kaggle provides structured **learning paths and micro-courses** on topics such as Python, Machine Learning, Data Visualization, and Deep Learning, making it ideal for beginners as well as advanced learners. Its **Kaggle Notebooks** offer a cloud-based environment where students can write and execute code without the need for local setup, making experimentation easy and accessible.

Another key feature is the **Kaggle community**, where users can explore publicly shared notebooks, solutions, and discussions. This collaborative environment allows students to learn different approaches to problem-solving, gain insights from experts, and stay updated with the latest trends in data science.

For students, Kaggle is an excellent platform to develop analytical skills, participate in competitions, and build a strong portfolio. It bridges the gap between theoretical knowledge and real-world application.

Free Tier / Student Access

<https://www.kaggle.com>

Advantages

- Access to real-world datasets
- Free cloud-based coding environment
- Opportunities to participate in competitions
- Strong community support and learning resources

Caution

- Requires basic knowledge of programming
- Competitive environment may be challenging for beginners
- Large datasets may require efficient resource handling

Article by

K.S. Manikanta
(21F01A05F6)



PUZZLE CORNER – Test Your Tech Brain!

Debug the Code

(Java Challenge)

“Looks simple... but why isn't it working?” 🤔

```
public class DebugTest {
    public static void main(String[] args) {
        int sum = 0;

        for (int i = 1; i <= 5; i++); {
            sum += i;
        }

        System.out.println("Sum = " + sum);
    }
}
```

Binary Puzzle

*0s and 1s are arguing again...
Can you settle it?*

What is **1011 + 1101** in binary?

Loop Logic

*If all loops are iterative
and some iterative
processes are recursive,
are all loops recursive?*



Boolean Brain Teaser

What is the output?

//Python

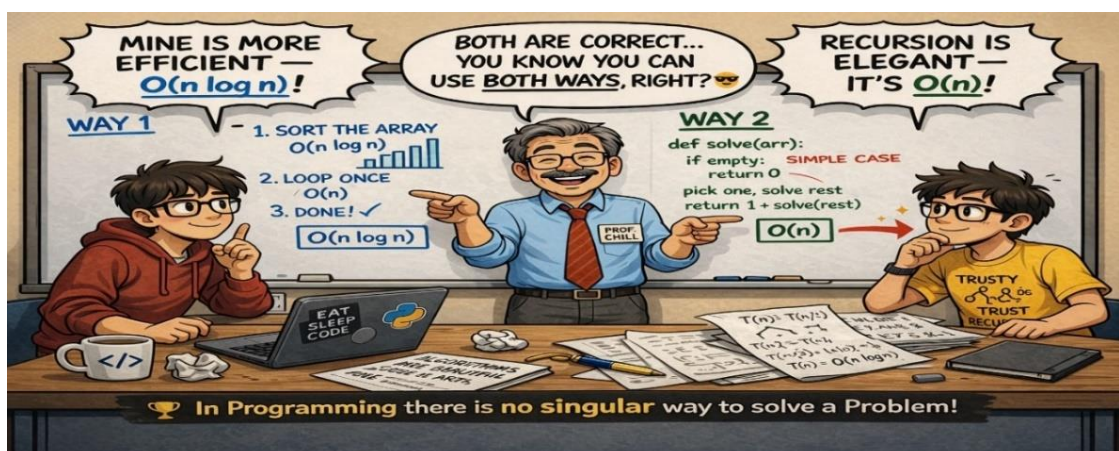
print(False or True and False)

One-Liners

“Why write 10 lines when 1 line can do the job?” 😊

Show your **Python** magic by **Reversing a string** using just one line of code!

HUMOUR CORNER



Cartoon by A. V. Gopi Karthik(21F01A0504)

Answer Unlocked

Debug the Code

✗ **Incorrect:**

```
for (int i = 1; i <= 5; i++);
```

✓ **Correct:**

```
for (int i = 1; i <= 5; i++)
```

What's the issue?

There is a **semicolon (;)** after the **for loop**, which makes the loop run as an **empty loop**. Because of this:

- The block {sum += i; } is **NOT inside the loop**
- Variable **i** is **out of scope**, leading to a **compilation error**

😓 *One tiny semicolon... one BIG headache!*

Boolean Brain Teaser

Output: False

💡 **Explanation:**

In Python, **and** has higher precedence than **or**.

So, the expression is evaluated as:

False or (True and False) → False or False → False

Loop Logic

No, all loops are not recursive.

💡 **Reason:**

- All loops are iterative ✓
- Only *some* iterative processes are recursive ✗

So, recursion applies only to a subset, not all loops.

Binary Puzzle

Step 1: Convert Binary to Decimal

$$1011_2 = (1 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0) = 8 + 0 + 2 + 1 = 11$$

$$1101_2 = (1 \times 2^3 + 1 \times 2^2 + 0 \times 2^1 + 1 \times 2^0) = 8 + 4 + 0 + 1 = 13$$

Step 2: Add 11 and 13

$$11 + 13 = 24$$

Step 3: Convert 24 in Decimal to Binary

$$24 \div 2 = 12 \text{ remainder } 0$$

$$12 \div 2 = 6 \text{ remainder } 0$$

$$6 \div 2 = 3 \text{ remainder } 0$$

$$3 \div 2 = 1 \text{ remainder } 1$$

$$1 \div 2 = 0 \text{ remainder } 1$$

Read from bottom → 11000₂

Step 4: Final Result

In Binary **1011 + 1101 = 11000**

One-Liners

Python code:

```
s = "HELLO"
print(s[::-1])
```

Output: OLLEH

Explanation:

- This uses **Python slicing**
- Format: string[start : end : step]
- [::-1] means:
 - Start to end
 - Step = -1 (move backwards)

👉 So the string is **reversed in one line**

Puzzles By: V. Mallikarjuna (22F01A05I6), P. Durga Prasad (22F01A05C9)

Message from the Editorial Team

We take immense pride and pleasure in presenting this latest edition of “**Configurations,**” continuing the **legacy** of our **departmental newsletter**.

We express our heartfelt **gratitude** to our respected **Head of the Department, Dr. P. Harini Madam**, for her constant **guidance** and **encouragement**. We also extend our sincere thanks to our esteemed **Principal, Dr. K. Jagadeesh Babu Sir**, and the **Management** for their unwavering **support**.

We would like to convey our special thanks to our **Faculty Mentor, M. Anusha**, for her valuable **mentorship** and continuous **support** throughout the preparation of this newsletter. We also sincerely thank all the **faculty members, students**, and **supporting staff** of the department for their **cooperation** and **contributions** in bringing out this edition successfully.

— **Student Editorial Team**
Department of Computer Science & Engineering

Student Editorial Team

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INDIA

HAPPY

REPUBLIC DAY

26th OF JANUARY