

A

Practical Assignment

on

New Age Life Skills - IT Skills lab

Masters of Computer Application - I Sem



RUNGTA INTERNATIONAL SKILLS UNIVERSITY
SESSION: 2025-26

Submitted To: -
Miss Priya Das

Submitted By: -
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ERP: RU-25-10317

**RUNGTA INTERNATIONAL SKILLS
UNIVERSITY, CG
SCHOOL OF INFORMATION TECHNOLOGY**

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S. No.	Name Of Practical	Submission Date	Remark
1.	Design a professional resume using templates.	22-09-2025	
2.	Create a Career Oriented Presentation with 7 slides using transitions and animations.	29-09-2025	
3.	Create a social media poster for “DIGITAL AWARENESS WEEK” using canva.	01-10-2025	
4.	Compose & send a professional email with an attachment as “you are applying for an internship, send email to HR with your resume attached”.	06-10-2025	
5.	Design a complete Google Form survey and analyze responses. <ul style="list-style-type: none"> a) Create a Google Form titled “Student Attendance Report”. b) Include the following question types: <ul style="list-style-type: none"> a. 5 MCQs b. 1 Rating scale (1–5) c. 1 Short answer d. 1 Checkbox question c) Customize the theme (header image + color). d) Share the form link with 5 friends and collect responses. e) Generate charts from responses and take screenshots of the analysis page. 	11-10-2025	
6.	Demonstrate the creation and management of your digital identity. <ul style="list-style-type: none"> a) Create a social media profile (LinkedIn preferred). b) Add a profile photo, short bio, skills, and education details. c) Create a simple post about “My Learning Journey in Digital Literacy.” d) Change your privacy settings to: <ul style="list-style-type: none"> a. Who can see your posts. b. Who can message you 	31-10-2025	
7.	Using Google Drive or OneDrive: <ul style="list-style-type: none"> a) Create a new folder named “Unit 3 Practical Work”. 	13-11-2025	

	<ul style="list-style-type: none"> b) Upload 3 different files (PDF, image, document). c) Organize them in subfolders: Notes, Images, Assignments. d) Share the main folder with your teacher with View Only permission. 		
8.	<p>Identify one real phishing email : A final-year student, Aman, receives a LinkedIn message saying:</p> <p>“You are shortlisted for a Remote Software Developer role at Google. Salary: ₹18 LPA. Pay ₹2,499 as verification fee. Limited seats. Pay now to confirm.”</p> <p><u>ANSWER THE QUESTIONS :-</u></p> <ul style="list-style-type: none"> a) What type of cybercrime is happening here? b) List 3 red flags that show it is a scam? c) What should he do to verify if a job offer is real? 	19-11-2025	
9.	<p>Create a Google Form Quiz with the following requirements:</p> <ul style="list-style-type: none"> a) Convert the form into a Quiz mode with automatic grading. b) Add 5 MCQ questions, each carrying 2 marks. c) Add 1 short answer question that requires manual evaluation. d) Turn ON the setting: <ul style="list-style-type: none"> a. <i>Limit to 1 response</i> b. <i>Shuffle question order</i> c. <i>Release marks after manual review</i> e) Add a timer add-on (like form presenter) and set up a 10-minute time limit. f) Finally, send the quiz link and view the response summary. 	24-11-2025	
10.	<p>Ask ChatGPT OR Google Gemini to generate a 100–120 word paragraph on:</p> <p>“Is online learning better than offline learning for college students?”</p> <ul style="list-style-type: none"> a) Run the AI-generated text through Grammarly and any plagiarism-check tool. 	29-11-2025	

	<p>b) Now manually search online to check if similar sentences exist on blogs or articles.</p> <p>c) Identify 2–3 biased statements in the AI answer, such as:</p> <ul style="list-style-type: none"> i. Over-generalizations ii. One-sided opinions iii. Unproven claims <p>d) Rewrite the entire paragraph in a neutral and balanced way, using AI only for grammar suggestions.</p> <p>e) Submit 3 screenshots:</p> <ul style="list-style-type: none"> i. Plagiarism check result ii. Grammarly suggestion page iii. Original AI paragraph vs your rewritten unbiased version 		
11.	<p>To compare AI-generated content with student-created content and understand limitations of AI.</p> <p>a) Write a 100–150 word paragraph on the topic: “Will AI replace jobs or change them?” (This must be written by the student.)</p> <p>b) Ask any AI tool (ChatGPT/Gemini/Copilot) to write the same topic.</p> <p>c) In your practical copy, create a Comparison Table with the headings:</p> <ul style="list-style-type: none"> I. Human-Generated Content II. AI-Generated Content 	03-12-2025	
12.	<p>Create a new NotebookLM project titled: “My Chapter Revision Notes.”</p> <p>a) Upload multiple sources (any 2) such as:</p> <ul style="list-style-type: none"> i. PDF notes ii. Web articles iii. Text copied into NotebookLM 	10-12-2025	

	<p>b) Ask NotebookLM to:</p> <ul style="list-style-type: none"> i. Create a combined study guide using all sources. ii. Generate flashcards for quick revision. iii. Create a concept map or explanation of the topic. <p>c) Manually check for:</p> <ul style="list-style-type: none"> i. Any incorrect facts ii. Repeated information iii. Missing important points <p>d) Attach 3 screenshots from NotebookLM:</p> <ul style="list-style-type: none"> i. Combined study guide ii. Flashcards iii. Concept map / explanation 		
13.	<p>Create a complete Student Result Management workbook.</p> <p>a) Create a new workbook with 3 sheets renamed as:</p> <ul style="list-style-type: none"> a. <i>Student_Data</i> b. <i>Marks_Analysis</i> c. <i>Charts</i> <p>b) In <i>Student_Data</i>, enter a list of 15 students with: Name, Roll No, Class, City, Subject1, Subject2, Subject3.</p> <p>c) Use Flash Fill to split “Full Name” into “First Name” and “Last Name”.</p> <p>d) Use Find & Replace to replace city name “Delhii” with correct “Delhi”.</p> <p>e) Use IF function to calculate Pass/Fail (Pass = total \geq 120).</p> <p>f) Use COUNTIF to find how many students belong to “Delhi”.</p> <p>g) Use AVERAGE, MAX, MIN to analyze marks in the <i>Marks_Analysis</i> sheet.</p> <p>h) On the <i>Charts</i> sheet, create:</p> <ul style="list-style-type: none"> i. A Bar Chart showing marks of any one subject. ii. A Pie Chart showing percentage of pass vs fail. 	19-12-2025	

	<p>i) Apply Conditional Formatting to highlight marks < 40 in red.</p> <p>j) Convert the table into a formatted Excel Table.</p>		
14.	<p>Build a workbook for managing and analyzing sales data of a small store.</p> <p>a) Create a workbook with sheets:</p> <ul style="list-style-type: none"> I. <i>Store_Sales</i> II. <i>Summary</i> III. <i>Charts</i> <p>b) Import a CSV sales file (or create a sample table) containing: Date, Product, Category, Quantity, Price, Total Sales.</p> <p>c) Use Sort (A→Z, Z→A) to organize products by name and category.</p> <p>d) Apply Filter to view only “Electronics” category.</p> <p>e) Use SUMIF to find total sales for a selected product (e.g., “Headphones”).</p> <p>f) Use LEFT, RIGHT, MID to extract:</p> <ul style="list-style-type: none"> I. First 3 letters of the product name II. Last 2 letters of the category <p>g) Find the highest and lowest sales value using MAX/MIN.</p> <p>h) Prepare a monthly sales summary in the <i>Summary</i> sheet using AVERAGE & SUM.</p> <p>i) Create a Line Chart of month-wise total sales in the <i>Charts</i> sheet.</p> <p>j) Apply sheet protection so data cannot be edited accidentally.</p>	24-12-2025	
15.	<p>Create a complete personal financial planner workbook.</p> <p>a) Create and rename sheets as:</p> <ul style="list-style-type: none"> a. <i>Expenses</i> b. <i>Budget</i> c. <i>Charts</i> <p>b) Enter at least 20 rows of expense data: Date, Category, Expense Detail, Amount, Payment Method.</p>	29-12-2025	

	<p>c) Use Data Validation dropdown to create a category list (Food, Travel, Fees, Shopping, Other).</p> <p>d) Use Remove Duplicates on the Category column if repeated incorrectly.</p> <p>e) Use SUMIF to calculate total spending for each category.</p> <p>f) In the <i>Budget</i> sheet, create the monthly budget and compare with actual expenses using: $\text{Difference} = \text{Budget} - \text{Actual}$ (formula required)</p> <p>g) Highlight expenses above ₹2000 using Conditional Formatting.</p> <p>h) Create:</p> <ul style="list-style-type: none"> i. A Pie Chart showing category-wise spending ii. A Bar Chart comparing <i>Budget vs Actual</i> iii. Use Flash Fill to separate date into Day / Month / Year if needed. Also explain its detail iv. Save worksheet in Page Layout view and adjust print area. 	
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Practical-01

Aim: Design a professional resume using templates.

ASHPREET KAUR

9770894744 | ashpreet110507@gmail.com

Objective

To obtain a challenging data scientist position in a dynamic and innovative organization where I can use my technical and analytical skills.

Education

Rungta International Skills University,

2025-27

MCA in AI/ML

Skills

- Python
- SQL
- Excel
- Numpy
- Pandas
- Power BI
- Attention to detail
- Problem solving
- Communication

Project

Netflix Dashboard

- Cleaned and processed the Netflix dataset using Pandas.
- Loaded cleaned data into MySQL using MySQL Connector.
- Connected MySQL data to Power BI for real-time analysis.
- Performed EDA on content trends and rating patterns.
- Created visualizations using Matplotlib and Seaborn.
- Built an interactive Power BI dashboard for insights.
- Tech Stack: Pandas, MySQL, and Power BI.

Practical-02

Aim: Create a career oriented presentation with 7 slides using transitions and animations.



A slide titled "Self-Assessment: The Foundation" in a teal, sans-serif font. It features two main sections: "Strengths & Weaknesses" and "Values & Interests", each enclosed in a light gray rounded rectangle. The "Strengths & Weaknesses" section contains text about SWOT analysis. The "Values & Interests" section contains text about aligning career with core values and interests.

Strategic Goal Setting



Set SMART Goals

Goals must be Specific, Measurable, Achievable, Relevant, and Time-bound. This framework transforms vague aspirations into actionable targets.



Create a Roadmap

Break down long-term objectives into smaller, manageable milestones. A visual roadmap helps track progress and maintain motivation over time.



Review & Adapt

The job market is dynamic. Regularly review your goals every quarter. Be flexible enough to pivot when new opportunities or challenges arise.

Building Bridges

The Power of Networking

Networking is not just about exchanging business cards; it's about building genuine, mutually beneficial relationships. 85% of jobs are filled through networking.

- Attend industry conferences and local meetups.
- Engage meaningfully on platforms like LinkedIn.
- Seek mentorship from experienced professionals.
- Offer value to your network before asking for favors.



Continuous Learning & Upskilling

Earn Relevant Certifications

Stay competitive by validating your skills with industry-recognized credentials. This demonstrates commitment to your field.

Master New Technologies

Embrace digital transformation. Proficiency in the latest tools and software is often a key differentiator for promotions.

Develop Soft Skills

Technical skills get you the job; soft skills (communication, leadership, emotional intelligence) get you promoted.

Adopt a Growth Mindset

View challenges as opportunities to learn. A willingness to learn is often valued higher than current knowledge.

Cultivating "Brand You"



Your Professional Reputation

Your personal brand is what people say about you when you're not in the room. In today's digital age, your online presence is your new resume.

Key Actions:

- Optimize your social media profiles.
- Share thought leadership content.
- Maintain consistency in your messaging and visual identity.



“
THE ONLY WAY
TO DO GREAT
WORK IS TO
LOVE WHAT
YOU DO.
—Steve Jobs
”

www.distinctiveweb.com

Practical-03

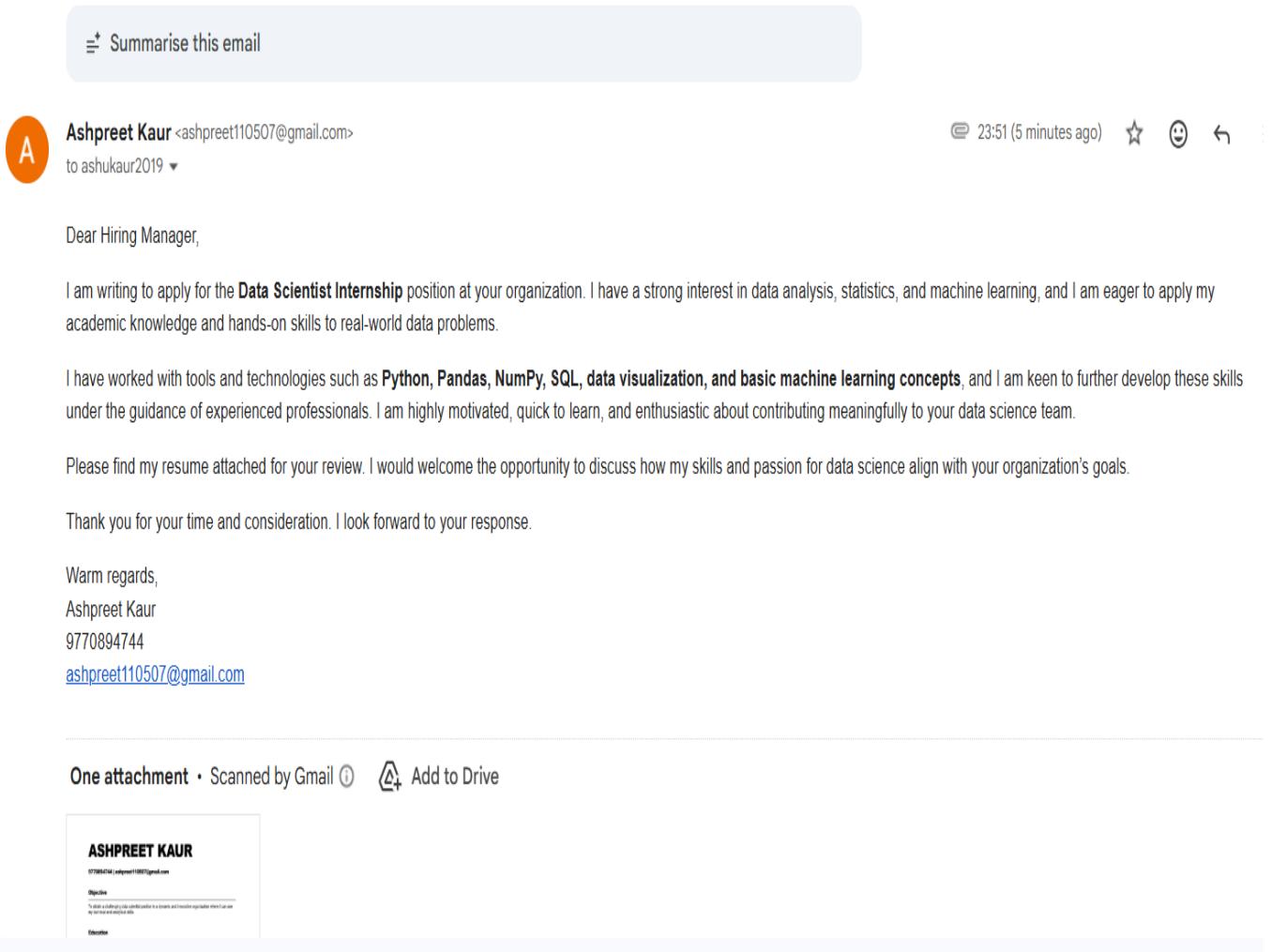
Aim: Create a social media poster for “Digital awareness week” using canva.



Practical-04

Aim: Compose and send a professional email with an attachment as “you are applying for an internship, send email to HR with your resume attached”.

Application for Data Scientist Internship – Resume Attached

Summarise this email

A **Ashpreet Kaur** <ashpreet110507@gmail.com>
to ashukaur2019 ▾ 🕒 23:51 (5 minutes ago) ⭐ 😊 ← ...

Dear Hiring Manager,

I am writing to apply for the **Data Scientist Internship** position at your organization. I have a strong interest in data analysis, statistics, and machine learning, and I am eager to apply my academic knowledge and hands-on skills to real-world data problems.

I have worked with tools and technologies such as **Python, Pandas, NumPy, SQL, data visualization, and basic machine learning concepts**, and I am keen to further develop these skills under the guidance of experienced professionals. I am highly motivated, quick to learn, and enthusiastic about contributing meaningfully to your data science team.

Please find my resume attached for your review. I would welcome the opportunity to discuss how my skills and passion for data science align with your organization's goals.

Thank you for your time and consideration. I look forward to your response.

Warm regards,
Ashpreet Kaur
9770894744
ashpreet110507@gmail.com

One attachment • Scanned by Gmail ⓘ  Add to Drive



Practical-05

Aim: Design a complete Google form survey and analyze responses.

- a) Create a google form titled “Student attendance report”.
- b) Include the following question types:
 - 5 MCQs
 - 1 Rating scale (1-5)
 - 1 Short Answer
 - 1 Checkbox question
- c) Customize the theme (header image + color).
- d) Share the form link with 5 friends and collect responses.
- e) Generate charts from responses and take screenshots of the analysis page.



Student Attendance Report

This form is designed to collect student attendance data for academic reporting.

ashpreet110507@gmail.com [Switch accounts](#) 

 Not shared

* Indicates required question

Which course are you enrolled in? *

BBA
 MCA
 BCA
 B.Tech

What is your current semester? *

- 1
- 2
- 3
- 4
- 5
- Option 6

Do you attend classes regularly? *

- Always
- Sometimes
- Never
- Rarely

Mode of class attended? *

- Online
- Offline
- Hybrid

How often do you arrive on time? *

- Always
- Mostly
- Sometimes
- Rarely

Rate your class participation level *

1 2 3 4 5

Low

High

Write your name *

Your answer

Reason for absences *

- Health issues
- Personal issues
- Transport issues
- Lack of interest
- Other activities

Submit

Clear form

Never submit passwords through Google Forms.

This content is neither created nor endorsed by Google. - [Contact form owner](#) - [Terms of Service](#) - [Privacy Policy](#)

Does this form look suspicious? [Report](#)

Google Forms

1 response

 [Link to Sheets](#)

⋮

Summary

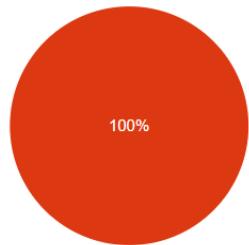
Question

Individual

Which course are you enrolled in?

 [Copy chart](#)

1 response

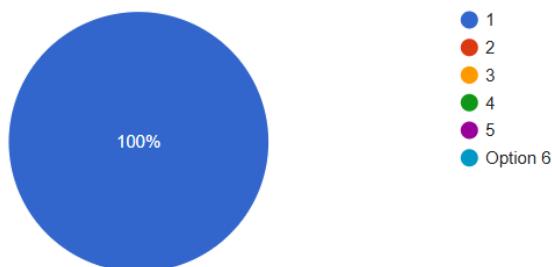


- BBA
- MCA
- BCA
- B.Tech

What is your current semester?

 Copy chart

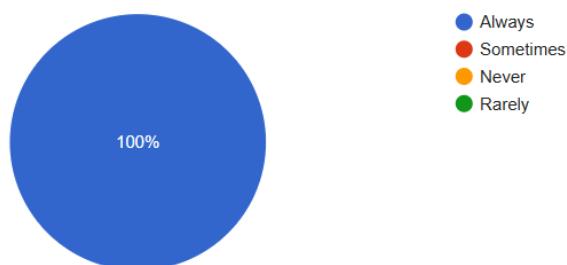
1 response



Do you attend classes regularly?

 Copy chart

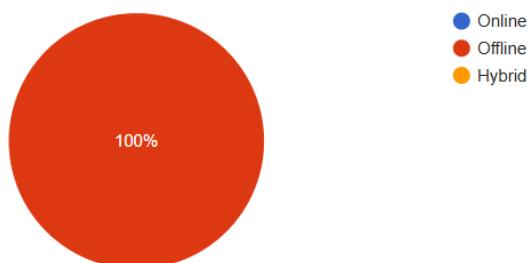
1 response



Mode of class attended?

 Copy chart

1 response



How often do you arrive on time?

 Copy chart

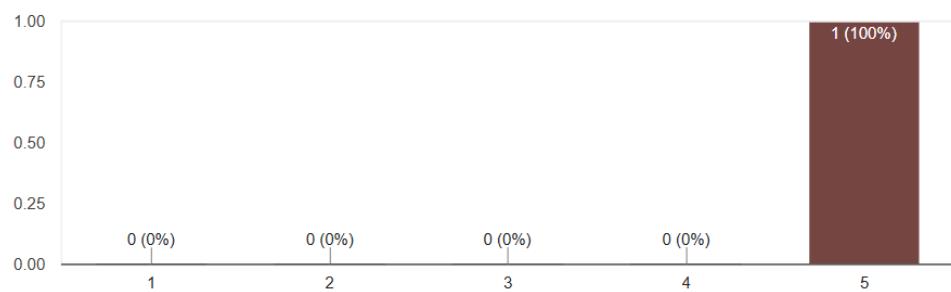
1 response



Rate your class participation level

 Copy chart

1 response



Write your name

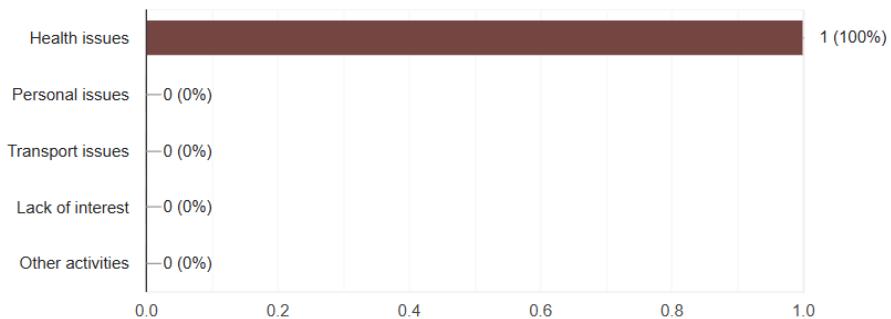
1 response

Ashpreet Kaur

Reason for absences

 Copy chart

1 response



Practical-06

Aim: Demonstrate the creation and management of your digital identity.

- a) Create a social media profile (LinkedIn preferred).
- b) Add a profile photo, short bio, skills, and education details.
- c) Create a simple post about “My learning journey in digital literacy.”
- d) Change your privacy settings to:
 - a. Who can see your posts.
 - b. Who can message you.



Ashpreet Kaur Add verification badge

Data Analysis || Data Science Enthusiast
Bhilai, Chhattisgarh, India · [Contact info](#)

500+ connections

[Open to](#) [Add profile section](#) [Enhance profile](#) [Resources](#)

About

I am a highly motivated Data Analyst with a strong foundation in data analysis, visualization, and business intelligence. Through continuous learning, I have gained hands-on experience in data cleaning, exploratory data analysis (EDA), and dashboard creation.

I am eager to apply my analytical and problem-solving skills in a professional environment, contribute to data- ...see more

Top skills

Python (Programming Language) • English • SQL



Practical-07

Aim: Using Google Drive or One Drive:

- a) Create a new folder name “Unit 3 Practical Work”.
- b) Upload a 3 different files (PDF, Image, document).
- c) Organize them in subfolders: Notes, Images, Assignments.
- d) Share the main folder with your teacher with view only permission.

... > **Images** ▾

Type People Modified Source

Name	Date modified	⋮
Poster - Digital Awareness Week (1).png	14 Dec	⋮

... > **Unit 3 Practical Work** ▾

Type People Modified Source

Name	Date modified	⋮
Assignment	20:56	⋮
Images	20:55	⋮
Notes	20:55	⋮

... > **Notes** ▾

Type People Modified Source

Name	Date modified	⋮
mca syllabus.pdf	14:39	⋮

TypePeopleModifiedSource

Sort⋮

Name	Owner	Date modified	File size	
Career Orientation.pdf	A me	27 Nov 2025	1.2 MB	⋮
Digital Awareness Poster.png	A me	28 Nov 2025	1.3 MB	⋮
Resume.pdf	A me	27 Nov 2025	113 KB	⋮

Practical-08

Aim: Identify one real phishing email: A final-year student, Aman, receives a LinkedIn message saying:

“You are shortlisted for a Remote Software Developer role at Google.

Salary: 18 LPA

Pay 2,499 as verification fee.

Limited seats. Pay now to confirm.”

Answer the questions:

- a) What type of cybercrime is happening here?
- b) List 3 red flags that show it is a scam?
- c) What should he do to verify if a job offer is real?

a) Type of cybercrime:

This is **Phishing + Job/Recruitment Fraud** (a form of **financial cybercrime and social engineering**).

b) 3 Red flags:

1. **Big brand (Google) + unrealistic claim** via a random LinkedIn message, not official hiring process.
2. **Asking to pay a “verification fee”** (legit companies never charge for job offers).
3. **Urgency/pressure tactic** — “Limited seats, pay now to confirm”.

c) Steps to verify the offer is real:

1. Check Google Careers portal for the same role or job ID.
2. Verify sender’s LinkedIn profile (official Google employee badge, company email domain, activity history).
3. Avoid paying anything — instead, ask for **official documentation** and recruiter’s **@google.com** email.
4. Contact Google support or employees through trusted channels to confirm.

Bottom line: No fee. No rush. Always cross-check on the company’s official platform.

Practical-09

Aim: Create a google form quiz with the following requirements:

- a) Convert the form into a quiz mode with automatic grading.
- b) Add 5 MCQ questions, each carrying 2 marks.
- c) Add 1 short answer question that requires manual evaluation.
- d) Turn ON the setting:
 - a. Limit to 1 response.
 - b. Shuffle question order
 - c. Release marks after manual review
- e) Add a timer add-on (like form presenter) and set up a 10-minute time limit
- f) Finally, send the quiz link and view the response summary.

The screenshot shows a Google Form quiz template. At the top, it says "Google Form Quiz". Below that is a "Form description" section with a note that the form is automatically collecting emails. The main question is "Google Form is used for? *", followed by five options: "Surveys & Quizzes", "Gaming", "Video Editing", and "Antivirus".

Google Form Quiz

Form description

This form is automatically collecting emails from all respondents. [Change settings](#)

Google Form is used for? *

Surveys & Quizzes

Gaming

Video Editing

Antivirus

CPU stands for *

- Central Processing Unit
- Computer Personal Unit
- Central Program Unit
- Control Processing Unit

Shortcut key to copy *

- Ctrl + C
- Ctrl + V
- Ctrl + X
- Ctrl + A

Which is an output device? *

- Monitor
- Keyboard
- Mouse
- Microphone

Gmail is a? *

- Email Service
- Messaging App
- Torrent App
- Antivirus

Explain the importance of digital literacy in daily life. *

Short-answer text

Submission Tracking ID - DO NOT CHANGE *

This is important for tracking purposes. Do not change. Any change in this will make your submission void

Short-answer text

1 response

 [Link to Sheets](#)

⋮

[Summary](#)

[Question](#)

[Individual](#)

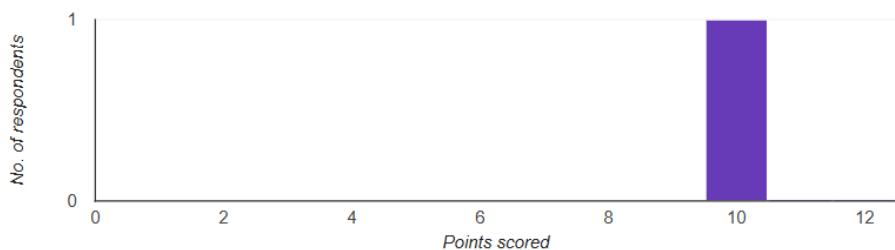
Insights

Average
10/12 points

Median
10/12 points

Range
10-10 points

Total points distribution



Scores

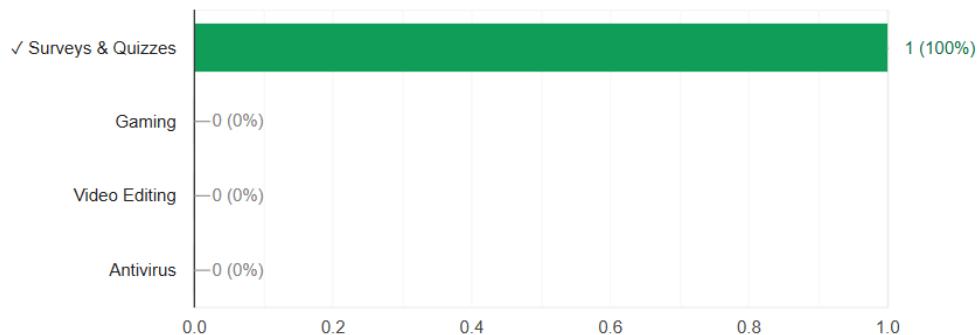
[Release scores](#)

Email	Score/12	Score released
ashpreet110507@gmail.com	10	Not released

Google Form is used for?

[Copy chart](#)

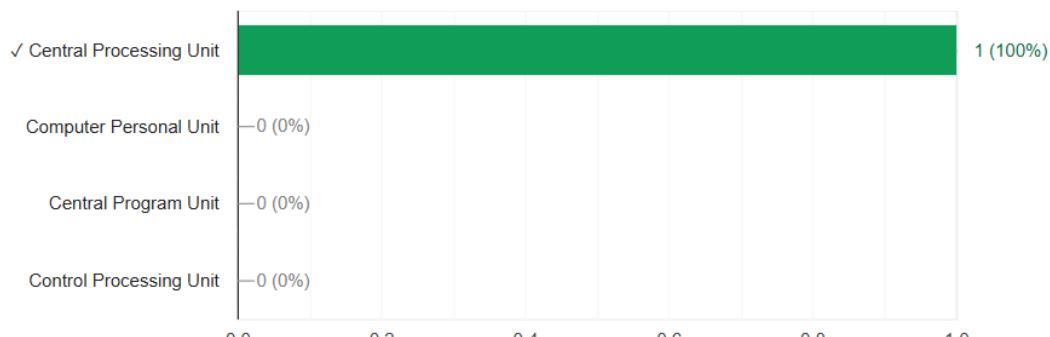
1 / 1 correct response



CPU stands for

[Copy chart](#)

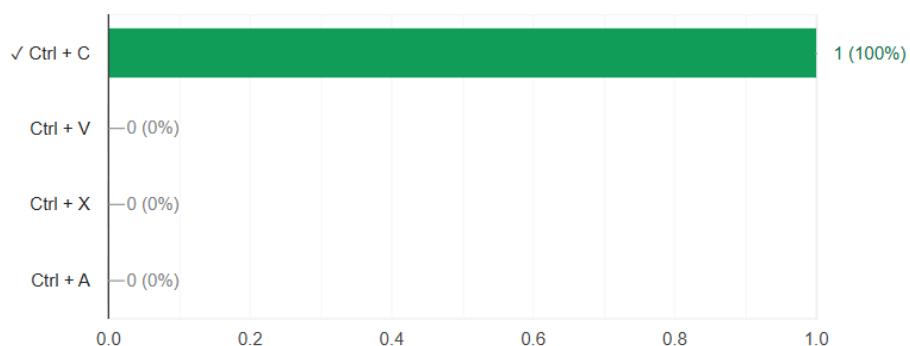
1 / 1 correct response



Shortcut key to copy

 Copy chart

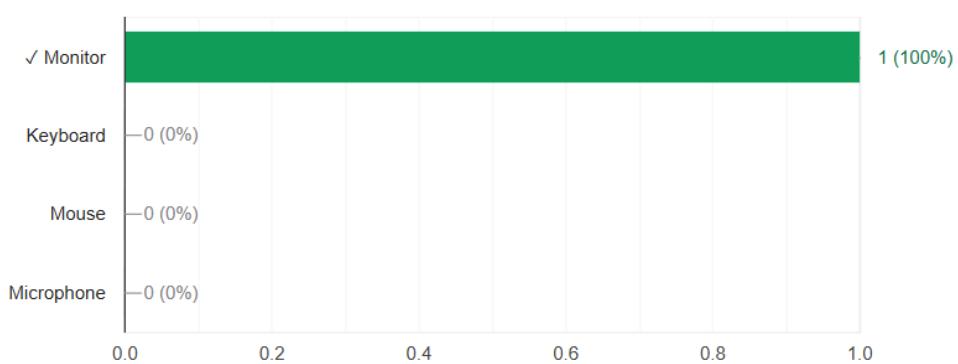
1 / 1 correct response



Which is an output device?

 Copy chart

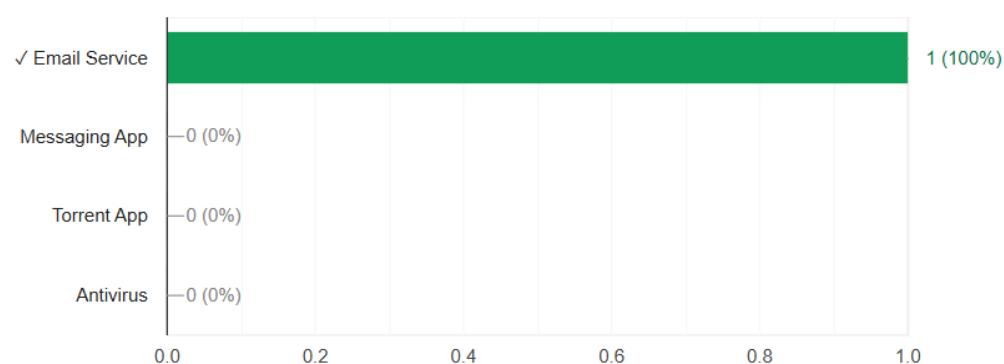
1 / 1 correct response



Gmail is a?

 Copy chart

1 / 1 correct response



Explain the importance of digital literacy in daily life.

1 response

Every thing is digital in today's world so it's important to have digital literacy.

Submission Tracking ID - DO NOT CHANGE

1 response

053464b1-d74f-485d-9095-e93d24060048

Practical-10

Aim: Ask ChatGPT or Google Gemini to generate a 100-120 word paragraph on:

“Is online learning better than offline learning for college students?”

- a) Run the AI-generated text through Grammarly and any plagiarism-check too.
- b) Now manually search online to check if similar sentences exist on blogs or articles.
- c) Identify 2-3 biased statements in the AI answer, such as:
 - i) Over-generalizations
 - ii) One-sided opinions
 - iii) Unproven claims
- d) Rewrite the entire paragraph in neutral and balanced way, using AI only for grammar suggestions.
- e) Submit 3 screenshots:
 - i) Plagiarism check result
 - ii) Grammarly suggestion page
 - iii) Original AI paragraph vs your rewritten unbiased version

While both online and offline learning have special benefits for college students, neither is always "better." Online learning is perfect for self-paced study and skill-based courses because it offers flexibility, affordability, and access to a wide range of global resources. However, it might not have the same advantages as offline learning, such as direct interaction, structured discipline, and practical experience. Through labs, seminars, and mentorship, traditional classrooms promote peer collaboration, real-time discussions, and practical exposure, all of which foster social and professional development. However, strict schedules, travel, and increased expenses may limit offline learning. The ideal strategy is a hybrid model that relies on offline settings for networking, experiential learning, and guided academic support while utilizing online platforms for theory, revisions, and upskilling. By combining the two, students can learn effectively while remaining interested and prepared for the workforce.

Scan Properties

Sources Found	0
Words	139
Characters	1022

[View More Details](#)Plagiarism
0%0%
Exact Match
0%
Partial MatchUnique
100%

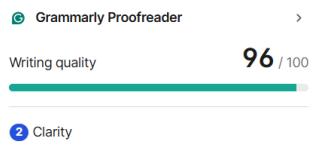
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While both online and offline learning have special benefits for college students, neither is always "better." Online learning is perfect for self-paced study and skill-based courses because it offers flexibility, affordability, and access to a wide range of global resources. However, it might not have the same advantages as offline learning, such as direct interaction, structured discipline, and practical experience. Through labs, seminars, and mentorship, traditional classrooms promote peer collaboration, real-time discussions, and practical exposure, all of which foster social and professional development. However, strict schedules, travel, and increased expenses may limit offline learning. The ideal strategy is a hybrid model that relies on offline settings for networking, experiential learning, and guided academic support while utilizing online platforms for theory, revisions, and upskilling. By combining the two, students can learn effectively while remaining interested and prepared for the workforce.

AI Chat

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For college students, online and offline learning both offer unique advantages, but neither is universally "better." Online learning provides flexibility, affordability, and access to diverse global resources, making it ideal for self-paced study and skill-based courses. However, it may lack direct interaction, structured discipline, and hands-on experience, which are strengths of offline learning. Traditional classrooms encourage real-time discussions, peer collaboration, and practical exposure through labs, seminars, and mentorship, enhancing social and professional growth. Yet, offline learning can be limited by rigid schedules, travel, and higher costs. The best approach is a hybrid model—using online platforms for theory, revisions, and upskilling, while relying on offline environments for experiential learning, networking, and guided academic support. Combining both helps students learn efficiently while staying engaged and career-ready.

Practical-11

Aim: To compare AI-generated content with student-created content and understand limitations of AI.

- a) Write a 100-150 word paragraph on the topic:
“Will AI replace jobs or change them?”
(This must be written by the student.)

 - b) Ask any AI tool (ChatGPT/Gemini/Copilot) to write the same topic.
 - c) In your practical copy, create a comparison table with the headings:
 - i) Human-Generated Content
 - ii) AI-Generated Content
-
- a) Artificial Intelligence is not only a job destroyer but a paradigm shift that reshapes the very fabric of employment. Although the overall impact of AI-driven automation could be job replacement, primarily because of tasks being very repetitive and predictable, its overall application is in jobs being transformed rather than being replaced. AI increases human efficiency through intelligent process automation, analytics, and generative capabilities. The overall function of jobs, right from software development to healthcare, finance, to education, is being transformed into AI-enabled platforms, which overall require human oversight, human optimization, and human decision-making. At the same time, new jobs are being added to AI as a governing structure, AI optimization, human AI interaction, and AI ethics. The overall job market favors a blended skill set, where technical savvy meets human adaptability, human judgment, and human creativity. In other words, AI is less of a replacement of jobs and more of a complementary function to human employment, which requires human strategic thought to make innovations viable.

Artificial Intelligence is not merely a disruptor of employment—it is a transformative force redefining the architecture of work. While automation enabled by AI may displace highly repetitive and predictable tasks, its broader impact lies in job evolution rather than absolute replacement. AI augments human efficiency through intelligent process automation, real-time analytics, and generative capabilities. Roles across domains such as software development, healthcare, finance, and education are transitioning toward AI-assisted frameworks requiring oversight, refinement, and contextual decision-making. Simultaneously, novel professions are surfacing in AI governance, model optimization, human-AI interaction design, and algorithmic ethics. The labor market increasingly rewards hybrid competencies—technical fluency combined with cognitive adaptability, critical reasoning, and creative intelligence. Consequently, AI is less likely to replace jobs at scale but more inclined to reshape them into collaborative human-machine workflows, where strategic human input remains indispensable for sustainable innovation and operational integrity.

c)

Human-Generated Content	AI-Generated Content
Written in simple, natural student language	Uses formal, analytical, machine-like vocabulary
Focuses on emotions, adaptability, and career advice	Focuses on automation, frameworks, and scalability
Less technical, more opinion-based	More structured, data-driven, and <u>concept heavy</u>
May include personal motivation and direct suggestions.	Gives <u>generalized</u> insights, lacks personal voice
Highlights skill-building from a learner perspective	Highlights industry transformations perspective
Limited use of complex terminology	Includes advanced AI-related terminology

Practical-12

Aim: Create a new NotebookLM project titled: "My chapter revision notes."

- a) Upload multiple sources (any 2) such as:
 - i) PDF Notes
 - ii) Web Articles
 - iii) Text copied into NotebookLM
- b) Ask NotebookLM to:
 - i) Create a combined study guide using all sources.
 - ii) Generated flashcards for quick revision.
 - iii) Create a concept map or explanation of the topic.
- c) Manually check for:
 - i) Any incorrect facts
 - ii) Repeated information
 - iii) Missing important points
- d) Attach 3 screenshots from NotebookLM:
 - i) Combined study guide
 - ii) Flashcards
 - iii) Concept map/explanation

Sources :

Select all sources	<input checked="" type="checkbox"/>
50 Latest Python Interview Questions (Asked in 2025) - UPES Online	<input checked="" type="checkbox"/>
COA Notes For MCA UNIT-1 PDF Computer Data Storage - Scribd	<input checked="" type="checkbox"/>
COMPUTER ORGANIZATION AND ARCHITECTURE - Vardhaman College of Engineering	<input checked="" type="checkbox"/>
Fundamentals of Computer Architecture and its Components - Jaro Education	<input checked="" type="checkbox"/>
MC4167-Python Programming Laboratory Manual - SRM VALLIAMMAI ENGINEERING COLLEGE	<input checked="" type="checkbox"/>
MCA-05 Computer Organization and Architecture Suggested Readings:	<input checked="" type="checkbox"/>
Python Data Structures Question Bank 2022 PDF - Scribd	<input checked="" type="checkbox"/>

Study Guide

combine all the study resources and create a brief study guide

Here is a brief study guide combining the Computer Organization & Architecture (COA) notes, Python programming resources, and Data Structure question banks provided in the sources.

Part 1: Computer Organization & Architecture (COA)

1. Basic Structure and Functions

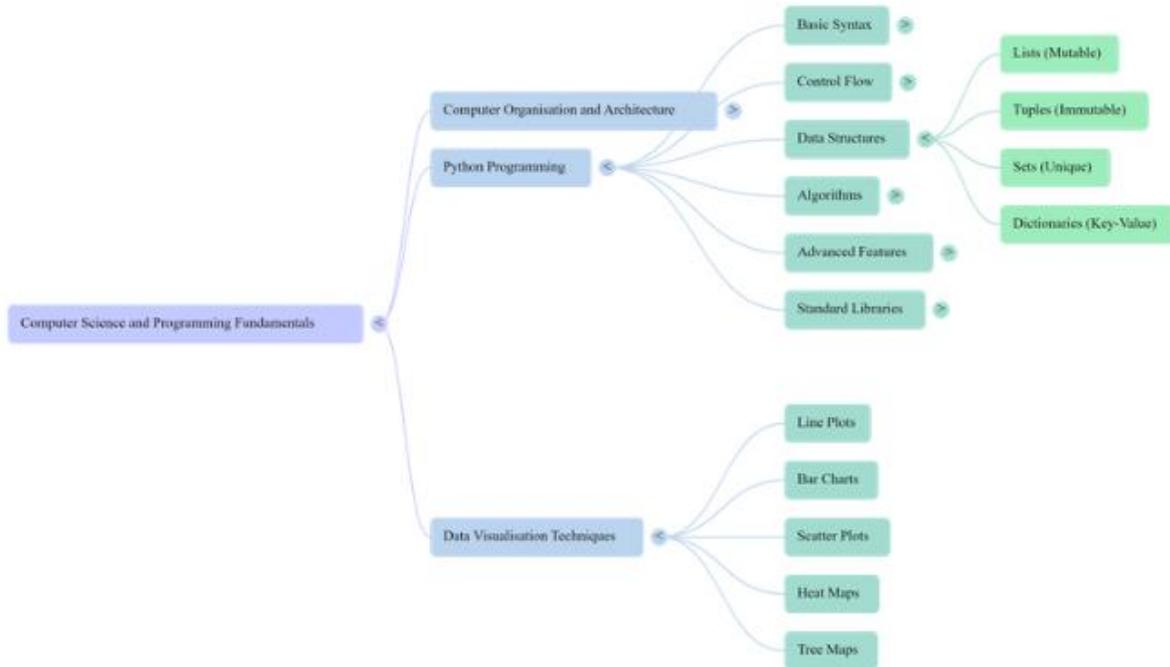
- **Architecture vs. Organization:** Architecture refers to the attributes visible to the programmer (instruction set, data types), while Organization refers to the operational units and hardware interconnections that realize the architecture [1](#) [2](#).
- **Functional Units:** The five main components are the **Input Unit**, **Memory Unit**, **Arithmetic & Logic Unit (ALU)**, **Output Unit**, and **Control Unit** [3](#).
- **Bus Structures:** A bus is a communication pathway connecting two or more devices.
 - **Types:** Data Bus (bidirectional), Address Bus (unidirectional), and Control Bus [4](#) [...](#).
 - **Architectures:** Single bus structures are simpler but slower; multiple bus structures

Start typing...

7 sources



Concept map



Practical-13

Aim: Create a complete Student Result Management workbook.

- a) Create a new workbook with 3 sheets renamed as:
 - a. Student_Data
 - b. Marks_Analysis
 - c. Charts
- b) In Student_Data, enter a list of 15 students with: Name, Roll No, Class, City, Subject1, Subject2, Subject3.
- c) Use Flash Fill to split “Full Name” into “First Name” and “Last Name”.
- d) Use Find & Replace to replace city name “Delhii” with correct “Delhi”.
- e) Use IF function to calculate Pass/Fail (Pass = total \geq 120).
- f) Use COUNTIF to find how many students belong to “Delhi”.
- g) Use AVERAGE, MAX, MIN to analyze marks in the Marks_Analysis sheet.
- h) On the Charts sheet, create:
 - i) A Bar Chart showing marks of any one subject. ii. A Pie Chart showing percentage of pass vs fail.
 - j) Apply Conditional Formatting to highlight marks < 40 in red.
 - k) Convert the table into a formatted Excel Table.

	A	B	C	D	E	F	G	H
1	Name	Roll	Class	City	Sub1	Sub2	Sub3	
2	Aman Singh	101	10	Delhii	45	56	48	
3	Riya Verma	102	10	Delhi	76	66	70	
4	Kunal Mehta	103	10	Mumbai	50	60	72	
5	Sneha Khan	104	10	Pune	80	55	90	
6	Priya Shah	105	10	Chennai	65	72	50	
7	Rahul Jain	106	10	Delhii	40	30	45	
8	Kabir Patel	107	10	Jaipur	78	69	81	
9	Meera Goyal	108	10	Delhi	55	62	59	
10	Arjun Yadav	109	10	Mumbai	88	76	91	
11	Tanya Sharma	110	10	Pune	66	71	73	
12	Vivek Desai	111	10	Chennai	44	50	40	
13	Harsh Gupta	112	10	Delhi	90	84	87	
14	Zoya Khan	113	10	Lucknow	70	65	80	
15	Divya Rao	114	10	Bangalore	58	63	52	
16	Krish Malhotra	115	10	Hyderabad	83	79	88	

	A	B	C	D	E	F	G	H	I
1	Name	Roll	Class	City	Sub1	Sub2	Sub3	First Name	Last Name
2	Aman Singh	101	10	Delhii	45	56	48	Aman	Singh
3	Riya Verma	102	10	Delhi	76	66	70	Riya	Verma
4	Kunal Mehta	103	10	Mumbai	50	60	72	Kunal	Mehta
5	Sneha Khan	104	10	Pune	80	55	90	Sneha	Khan
6	Priya Shah	105	10	Chennai	65	72	50	Priya	Shah
7	Rahul Jain	106	10	Delhii	40	30	45	Rahul	Jain
8	Kabir Patel	107	10	Jaipur	78	69	81	Kabir	Patel
9	Meera Goyal	108	10	Delhi	55	62	59	Meera	Goyal
10	Arjun Yadav	109	10	Mumbai	88	76	91	Arjun	Yadav
11	Tanya Sharma	110	10	Pune	66	71	73	Tanya	Sharma
12	Vivek Desai	111	10	Chennai	44	50	40	Vivek	Desai
13	Harsh Gupta	112	10	Delhi	90	84	87	Harsh	Gupta
14	Zoya Khan	113	10	Lucknow	70	65	80	Zoya	Khan
15	Divya Rao	114	10	Bangalore	58	63	52	Divya	Rao
16	Krish Malhotra	115	10	Hyderabad	83	79	88	Krish	Malhotra
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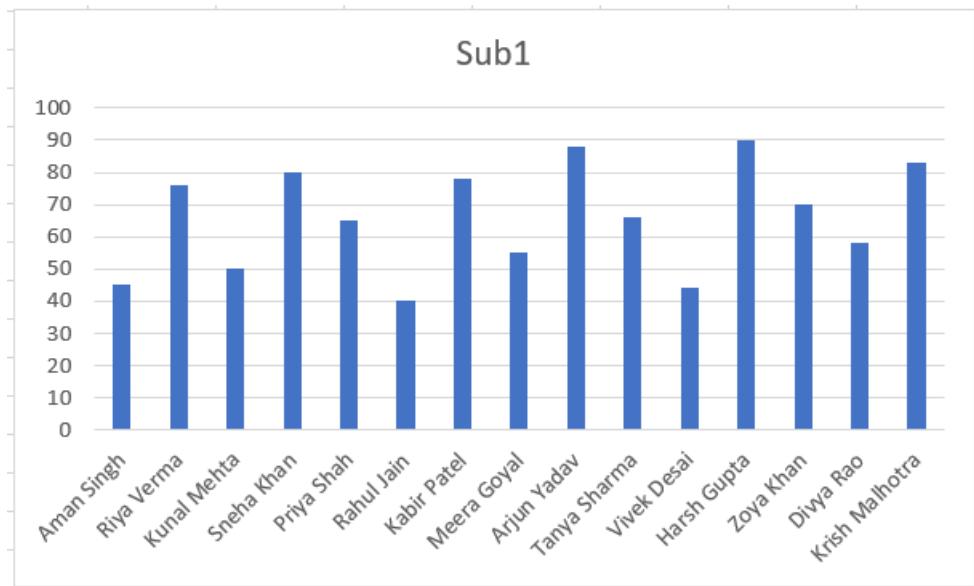
◀ ▶
Student_Data
Marks_Analysis
Charts
⊕

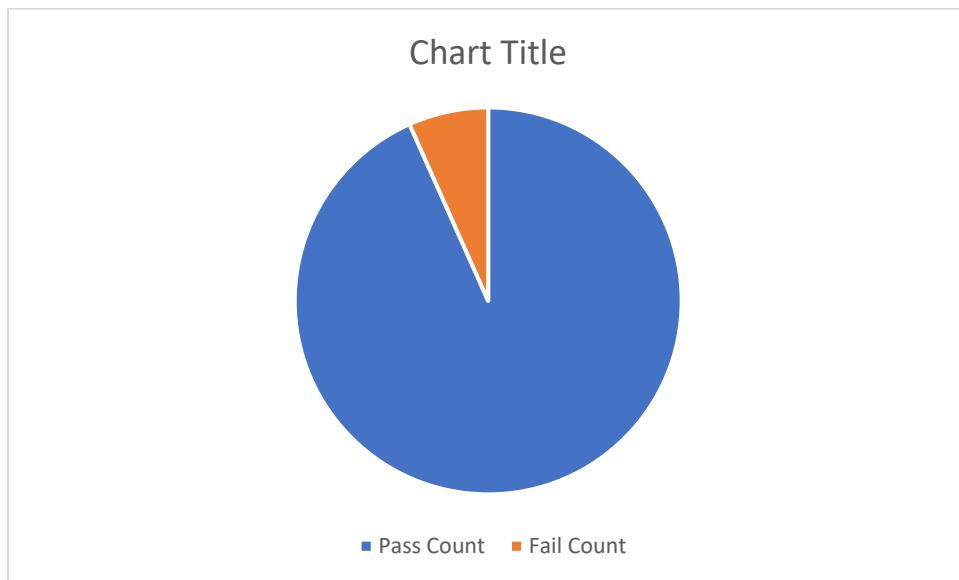
	A	B	C	D	E	F	G	H	I
1	Name	Roll	Class	City	Sub1	Sub2	Sub3	First Name	Last Name
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5	Sneha Khan	104	10	Pune	80	55	90	Sneha	Khan
6	Priya Shah	105	10	Chennai	65	72	50	Priya	Shah
7	Rahul Jain	106	10	Delhi	40	30	45	Rahul	Jain
8	Kabir Patel	107	10	Jaipur	78	69	81	Kabir	Patel
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13	Harsh Gupta	112	10	Delhi	90	84	87	Harsh	Gupta
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15	Divya Rao	114	10	Bangalore	58	63	52	Divya	Rao
16	Krish Malhotra	115	10	Hyderabad	83	79	88	Krish	Malhotra

	A	B	C	D	E	F	G	H	I	J	K
1	Name	Roll	Class	City	Sub1	Sub2	Sub3	First Name	Last Name	Total	Pass/Fail
2	Aman Singh	101	10	Delhi	45	56	48	Aman	Singh	149	PASS
3	Riya Verma	102	10	Delhi	76	66	70	Riya	Verma	212	PASS
4	Kunal Mehta	103	10	Mumbai	50	60	72	Kunal	Mehta	182	PASS
5	Sneha Khan	104	10	Pune	80	55	90	Sneha	Khan	225	PASS
6	Priya Shah	105	10	Chennai	65	72	50	Priya	Shah	187	PASS
7	Rahul Jain	106	10	Delhi	40	30	45	Rahul	Jain	115	FAIL
8	Kabir Patel	107	10	Jaipur	78	69	81	Kabir	Patel	228	PASS
9	Meera Goyal	108	10	Delhi	55	62	59	Meera	Goyal	176	PASS
10	Arjun Yadav	109	10	Mumbai	88	76	91	Arjun	Yadav	255	PASS
11	Tanya Sharma	110	10	Pune	66	71	73	Tanya	Sharma	210	PASS
12	Vivek Desai	111	10	Chennai	44	50	40	Vivek	Desai	134	PASS
13	Harsh Gupta	112	10	Delhi	90	84	87	Harsh	Gupta	261	PASS
14	Zoya Khan	113	10	Lucknow	70	65	80	Zoya	Khan	215	PASS
15	Divya Rao	114	10	Bangalore	58	63	52	Divya	Rao	173	PASS
16	Krish Malhotra	115	10	Hyderabad	83	79	88	Krish	Malhotra	250	PASS



A	B	C	
1	Average Marks	Highest Marks (Max)	Lowest Marks (Min)
2	66.04444444	91	30





1	Name	Roll	Class	City	Sub1	Sub2	Sub3	First Name	Last Name	Total	Pass/Fail
2	Aman Singh	101	10	Delhi	45	56	48	Aman	Singh	149	PASS
3	Riya Verma	102	10	Delhi	76	66	70	Riya	Verma	212	PASS
4	Kunal Mehta	103	10	Mumbai	50	60	72	Kunal	Mehta	182	PASS
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9	Meera Goyal	108	10	Delhi	55	62	59	Meera	Goyal	176	PASS
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11	Tanya Sharma	110	10	Pune	66	71	73	Tanya	Sharma	210	PASS
12	Vivek Desai	111	10	Chennai	44	50	40	Vivek	Desai	134	PASS
13	Harsh Gupta	112	10	Delhi	90	84	87	Harsh	Gupta	261	PASS
14	Zoya Khan	113	10	Lucknow	70	65	80	Zoya	Khan	215	PASS
15	Divya Rao	114	10	Bangalore	58	63	52	Divya	Rao	173	PASS
16	Krish Malhotra	115	10	Hyderabad	83	79	88	Krish	Malhotra	250	PASS

	A	B	C	D	E	F	G	H	I	J	K
1	Name	Roll	Clas	City	Sub	Sub	Sub	First Name	Last Name	Total	Pass/Fail
2	Aman Singh	101	10	Delhi	45	56	48	Aman	Singh	149	PASS
3	Riya Verma	102	10	Delhi	76	66	70	Riya	Verma	212	PASS
4	Kunal Mehta	103	10	Mumbai	50	60	72	Kunal	Mehta	182	PASS
5	Sneha Khan	104	10	Pune	80	55	90	Sneha	Khan	225	PASS
6	Priya Shah	105	10	Chennai	65	72	50	Priya	Shah	187	PASS
7	Rahul Jain	106	10	Delhi	40	30	45	Rahul	Jain	115	FAIL
8	Kabir Patel	107	10	Jaipur	78	69	81	Kabir	Patel	228	PASS
9	Meera Goyal	108	10	Delhi	55	62	59	Meera	Goyal	176	PASS
10	Arjun Yadav	109	10	Mumbai	88	76	91	Arjun	Yadav	255	PASS
11	Tanya Sharma	110	10	Pune	66	71	73	Tanya	Sharma	210	PASS
12	Vivek Desai	111	10	Chennai	44	50	40	Vivek	Desai	134	PASS
13	Harsh Gupta	112	10	Delhi	90	84	87	Harsh	Gupta	261	PASS
14	Zoya Khan	113	10	Lucknow	70	65	80	Zoya	Khan	215	PASS
15	Divya Rao	114	10	Bangalore	58	63	52	Divya	Rao	173	PASS
16	Krish Malhotra	115	10	Hyderabad	83	79	88	Krish	Malhotra	250	PASS

Practical-14

Aim: Build a workbook for managing and analyzing sales data of a small store. a) Create a workbook with sheets:

- I. Store_Sales
- II. Summary
- III. Charts

b) Import a CSV sales file (or create a sample table) containing: Date, Product, Category, Quantity, Price, Total Sales.

c) Use Sort (A→Z, Z→A) to organize products by name and category.

d) Apply Filter to view only “Electronics” category.

e) Use SUMIF to find total sales for a selected product (e.g., “Headphones”).

f) Use LEFT, RIGHT, MID to extract:

I. First 3 letters of the product name

II. Last 2 letters of the category g) Find the highest and lowest sales value using MAX/MIN.

h) Prepare a monthly sales summary in the Summary sheet using AVERAGE & SUM.

i) Create a Line Chart of month-wise total sales in the Charts sheet.

j) Apply sheet protection so data cannot be edited accidentally.

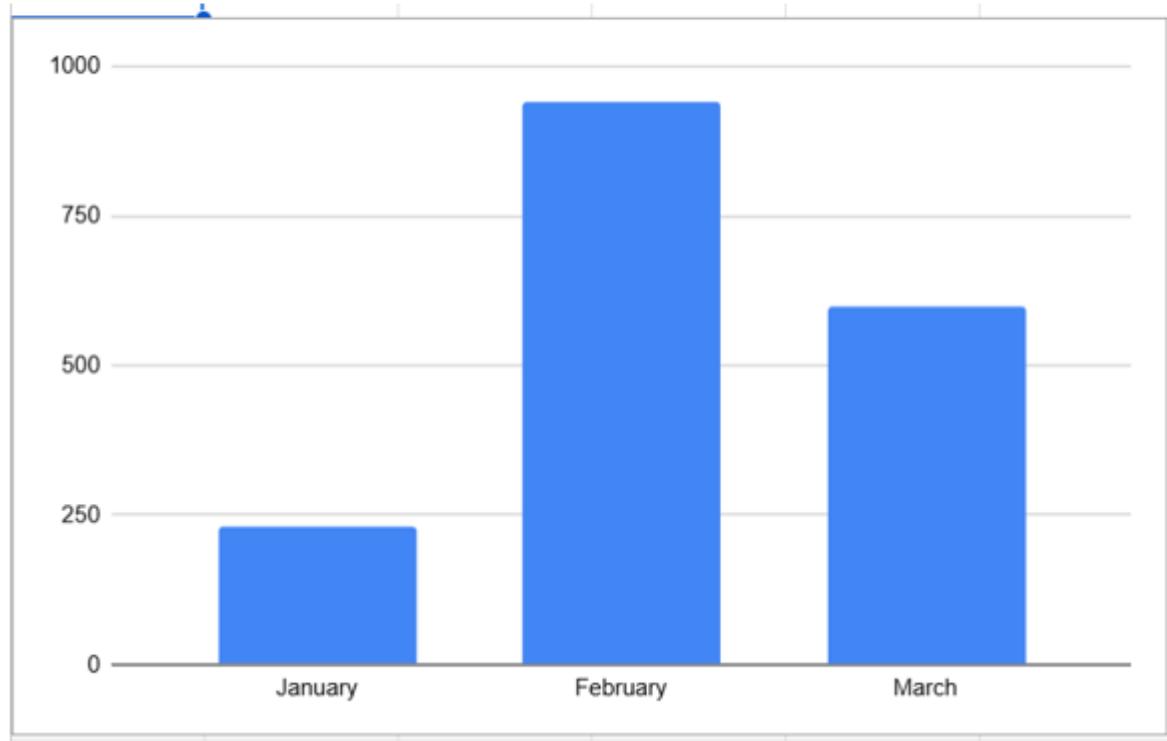
	A	B	C	D	E	F	G	H
1	Date	Product	Category	Quantity	Price	Total Sales	Short Name	Cat Code
2	1/15/2024	Headphones	Electronics	2	50	100	Hea	cs
3	3/12/2024	Headphones	Electronics	3	50	150	Hea	cs
6	01/05/2024	Keyboard	Electronics	1	30	30	Key	cs
7	2/10/2024	Laptop	Electronics	1	800	800	Lap	cs
8	3/20/2024	Monitor	Electronics	2	150	300	Mon	cs
9	03/05/2024	Mouse	Electronics	10	15	150	Mou	cs
12								

250

800

30

Month	Total Sales	Average Sales
January	230	57.5
February	940	313.33
March	600	200



Practical-15

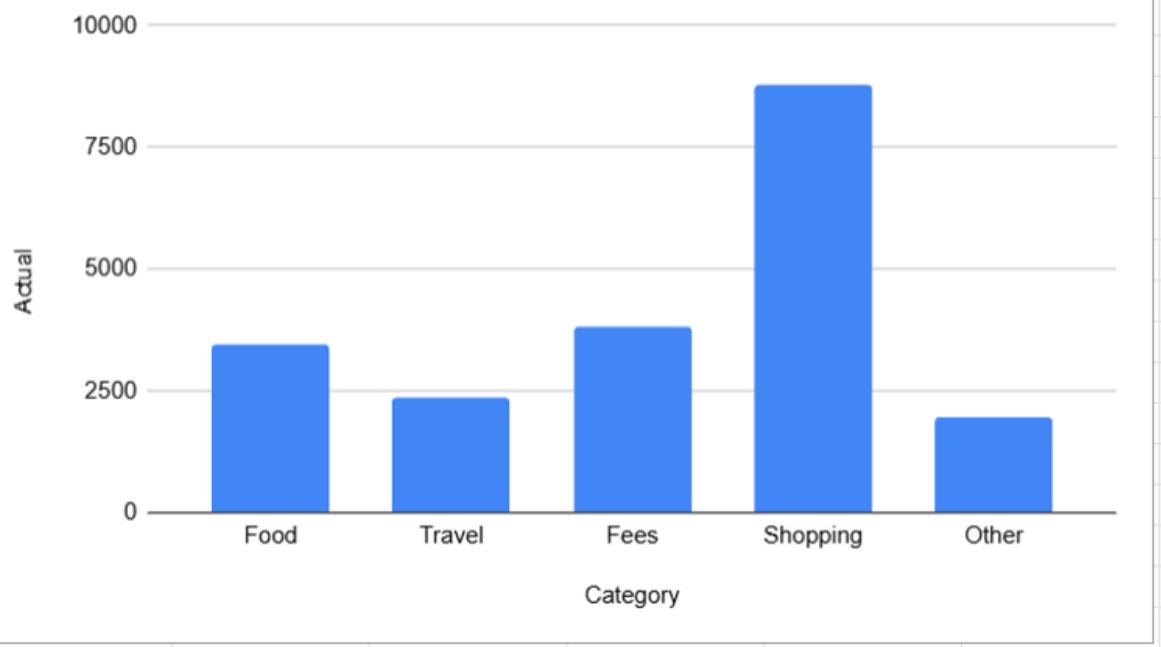
Aim: Create a complete personal financial planner workbook.

- a) Create and rename sheets as: a. Expenses b. Budget c. Charts
- b) Enter at least 20 rows of expense data: Date, Category, Expense Detail, Amount, Payment Method.
- c) Use Data Validation dropdown to create a category list (Food, Travel, Fees, Shopping, Other).
- d) Use Remove Duplicates on the Category column if repeated incorrectly.
- e) Use SUMIF to calculate total spending for each category.
- f) In the Budget sheet, create the monthly budget and compare with actual expenses using:
 $\text{Difference} = \text{Budget} - \text{Actual}$ (formula required)
- g) Highlight expenses above ₹2000 using Conditional Formatting.
- h) Create:
 - i. A Pie Chart showing category-wise spending
 - ii. A Bar Chart comparing Budget vs Actual
 - iii. Use Flash Fill to separate date into Day / Month / Year if needed. Also explain its detail
 - iv. Save worksheet in Page Layout view and adjust print area.

Date	Category	Expense Detail	Amount	Payment Method	Day	Month	Year
1/1/2024	Food	Groceries	1500	UPI	1	1	2024
1/2/2024	Travel	Uber	300	Card	2	1	2024
1/5/2024	Shopping	Jeans	2500	Cash	5	1	2024
1/6/2024	Food	Burger King	450	UPI	6	1	2024
1/8/2024	Fees	Gym Fee	1200	Card	8	1	2024
1/10/2024	Other	Mobile Recharge	299	UPI	10	1	2024
1/12/2024	Travel	Metro Card	500	Cash	12	1	2024
1/15/2024	Shopping	Shoes	3200	Card	15	1	2024
1/16/2024	Food	Pizza	800	UPI	16	1	2024
1/18/2024	Travel	Bus Ticket	50	Cash	18	1	2024
1/20/2024	Fees	Course Books	2100	UPI	20	1	2024
1/22/2024	Other	Netflix	649	Card	22	1	2024
1/24/2024	Food	Coffee	250	UPI	24	1	2024
1/25/2024	Shopping	T-Shirt	900	Cash	25	1	2024
1/26/2024	Travel	Train Ticket	1500	UPI	26	1	2024
1/27/2024	Food	Fruits	300	Cash	27	1	2024
1/28/2024	Fees	Exam Fee	500	UPI	28	1	2024
1/29/2024	Other	Gift	1000	Cash	29	1	2024
1/30/2024	Shopping	Watch	2200	Card	30	1	2024
1/31/2024	Food	Snacks	150	UPI	31	1	2024

Category	Budget	Actual	Difference
Food	5000	3450	1550
Travel	3000	2350	650
Fees	4000	3800	200
Shopping	5000	8800	-3800
Other	2000	1948	52

Actual vs. Category



Actual

