



MOUNT CARMEL SCHOOL, CHANDIGARH

MONTH - OCTOBER

Class VII

(Computational Thinking and Artificial Intelligence)

Interdisciplinary Project (Incorporating CTAI)

Module:-

Computational Thinking

Ch-1 Geometric Twins

Ch-2 Operations with Integers

Ch-3 Finding Common Ground

Ch-4 Another Peek Beyond the Point

Ch-5 Connecting the Dots

Ch-6 Constructions and Tilings

Ch-7 Finding the Unknown

Artificial Intelligence

Ch-3 Data Visualisation and Analysis.

Ch-4 Ethics and A.I Bias Awareness.

October- (Computational + Artificial + Social Science)

Topic : MONEY IN THE DIGITAL AGE

How India Saves, Spends and Stays Safe

Name: _____ Class & Section: _____ Roll No.: _____

☐ **Objective**

To understand how people around us save and use money, how digital payment methods such as UPI are changing everyday transactions, and how people protect themselves from digital fraud.

☐ **TASK**

Interview **3–5 family members, neighbours or acquaintances** and find out about their experiences with saving money and making transactions.

Ask them:

1. How do you usually save your money?

☐ Bank Account ☐ Cash ☐ Fixed Deposit ☐ Other: _____

2. Which payment methods do you commonly use?

☐ UPI ☐ ATM/Debit Card ☐ Cash ☐ Cheque ☐ Other: _____

3. What kinds of transactions do you perform through UPI?

For example: shopping, paying bills, transferring money, school fees, recharges, etc.

4. Do you find UPI better than using cash? Why or why not?

5. Have you or someone you know ever experienced a digital-fraud attempt?

☐ Yes ☐ No

If yes, what happened?

6. What did the person do after realising that it was a scam?

7. What did they learn from the experience?

☐ MY DATA

Person	Preferred Payment Method	Why?	Uses UPI?	Experienced/Heard of Fraud?
1. _____	_____	_____	Yes/No	Yes/No
2. _____	_____	_____	Yes/No	Yes/No
3. _____	_____	_____	Yes/No	Yes/No
4. _____	_____	_____	Yes/No	Yes/No
5. _____	_____	_____	Yes/No	Yes/No

☐ THINK LIKE A DATA SCIENTIST!

Study your responses and identify:

1. Which payment method was most commonly used?

2. What was the most common reason for using UPI?

3. What common warning signs of digital fraud did you notice?

4. What pattern did you observe in your data?

☐ CTAI CONNECTION

Computational Thinking

Use your collected information to:

Collect → Classify → Compare → Identify Patterns → Draw a Conclusion

Create a simple **bar graph/pictograph** showing the most commonly used payment methods among the people you interviewed.

Artificial Intelligence

Ask an AI tool:

“Analyse the following survey data and identify three important patterns.”

Then compare the AI’s response with your own findings.

Did the AI identify the same patterns?

☐ Yes ☐ No

Did you find anything in the AI’s response that needed checking or correction?

What did I learn about using AI responsibly?

☐ MY DIGITAL SAFETY ALGORITHM

Complete the sequence:

Suspicious Call/Message

↓

↓

↓

↓

Report/Seek Help

Remember:

Never share your OTP, PIN, password or other confidential banking information with anyone.

☐ **MY SURPRISING INSIGHT**

One thing that surprised me from my survey was:

☐ **Share it with your class!**

Be ready to share your **one surprising finding** and explain what you learnt from it.

☐ **REFLECTION**

The most important thing I learnt from this activity is:

One safe digital-payment habit I will follow is:

DECEMBER- (Computational + Artificial + Hindi)

'ए.आई. से कहानी बनाओ '

छात्र 4-5 शब्द देकर ए आई टूल को एक कहानी बनाने का निर्देश देंगे तत्पश्चात ए आई निर्मित कहानी में से संज्ञा, सर्वनाम क्रिया ,विशेषण छाँटेंगे।

JANUARY - (Computational + Artificial Intelligence)

How Data Helps AI Make Decisions

Name: _____ Class & Section: _____ Roll No.: _____

☐ **OBJECTIVE**

To understand how data can be collected, organized and represented visually, and how AI uses data to make decisions. Students will also understand the importance of fairness, ethics and avoiding bias in AI systems.

☐ **TASK 1 – COLLECT DATA**

Interview 5 people such as family members, neighbor's or friends.

1. Which digital activity do you use most often?

☐ Online Shopping ☐ Watching Videos ☐ Online Learning ☐ Social Media ☐ Online Payments

2. How much time do you approximately spend on digital activities each day?

☐ Less than 1 hour ☐ 1–2 hours ☐ 2–3 hours ☐ More than 3 hours

3. Have you ever used an AI-based feature?

☐ Yes ☐ No

If yes, mention one example: _____

4. Where do you think AI can be useful?

☐ Education ☐ Healthcare ☐ Transport ☐ Banking ☐ Other: _____

5. Do you think AI decisions should always be checked by humans?

☐ Yes ☐ No

Why? _____

☐ MY DATA

Person	Most Used Digital Activity	Daily Usage	Used AI?	AI Should Be Checked by Humans?
1. _____	_____	_____	Yes/No	Yes/No
2. _____	_____	_____	Yes/No	Yes/No
3. _____	_____	_____	Yes/No	Yes/No
4. _____	_____	_____	Yes/No	Yes/No
5. _____	_____	_____	Yes/No	Yes/No

☐ TASK 2 – VISUALISE THE DATA

Use your collected data to create:

A. Bar Graph – Show the number of people using different digital activities.

OR

B. Pictograph – Represent the most commonly used digital activities using suitable symbols.

Answer the following:

1. Which digital activity was used by the maximum number of people?

2. Which activity was used by the minimum number of people?

3. How many people in your survey had used an AI-based feature?

4. What pattern did you observe in your data?

☐ **THINK LIKE A DATA SCIENTIST!**

Collect → Organise → Classify → Represent → Analyse → Identify Patterns → Draw a Conclusion

Most common digital activity: _____

Most common usage time: _____

Number of people who have used AI: _____

One important pattern I noticed: _____

☐ **CTAI CONNECTION**

Computational Thinking

Data can help us understand people's choices and identify patterns.

Collect Data → Organise Data → Represent Data → Analyse Data → Identify Patterns → Draw a Conclusion

☐ **Artificial Intelligence Connection**

AI systems learn from data.

Use an AI tool and give it your survey data. Ask:

“Analyse this survey data and identify three important patterns.”

1. _____

2. _____

3. _____

Did the AI identify the same patterns? ☐ Yes ☐ No

Did you find anything in the AI’s response that needed checking or correction?

☐ **TASK 3 – AI ETHICS AND BIAS**

Imagine this situation:

An AI system is being used to select students for a special technology programme. The AI was trained using old data in which most selected students were boys. As a result, the system starts giving higher scores to boys than girls, even when both have similar skills.

1. Is this decision fair? ☐ Yes ☐ No

Why? _____

2. What kind of problem can this create?

3. What could be done to make the AI system fairer?

4. Should humans check important AI decisions? ☐ Yes ☐ No

Give one reason: _____

☐ **FIND THE BIAS**

Situation	Fair or Biased?	Why?
AI gives equal opportunities to all students	_____	_____
AI selects candidates only from data about one group	_____	_____
AI is checked regularly for unfair results	_____	_____
AI makes an important decision without human checking	_____	_____

☐ **MY RESPONSIBLE AI RULES**

Write three rules for using AI responsibly.

Rule 1: _____

Rule 2: _____

Rule 3: _____

Remember: AI can help us analyze data, but its results should be checked carefully.