# Assignment : 6.1

**Task 1** :

(Classes – Employee Management)  
• Task: Use AI to create an Employee class with attributes (name,  
id, salary) and a method to calculate yearly salary.  
• Instructions:  
o Prompt AI to generate the Employee class.  
o Analyze the generated code for correctness and structure.  
o Ask AI to add a method to give a bonus and recalculate  
salary

**CODE**:

A screenshot of a computer program

Description automatically generated

**OUTPUT**:

A screenshot of a computer

Description automatically generated

**OBSERVATION**: In this code we can Observe that the AI is not giving the Print output by default we have to say AI to print an Output .

**Task Description #2 (Loops – Automorphic Numbers in a Range)**

**• Task: Prompt AI to generate a function that displays all**

**Automorphic numbers between 1 and 1000 using a for loop.**

**• Instructions:**

**o Get AI-generated code to list Automorphic numbers using**

**a for loop.**

**o Analyze the correctness and efficiency of the generated**

**logic.**

**o Ask AI to regenerate using a while loop and compare both**

**implementations.**

**Expected Output #2:**

**• Correct implementation that lists Automorphic numbers using**

**both loop types, with explanation.**

**Prompt: Task Description #2 (Loops – Automorphic Numbers in a Range) • Task: Prompt AI to generate a function that displays all Automorphic numbers between 1 and 1000 using a for loop. • Instructions: o Get AI-generated code to list Automorphic numbers using a for loop. o Analyze the correctness and efficiency of the generated logic. o Ask AI to regenerate using a while loop and compare both implementations. Expected Output #2: • Correct implementation that lists Automorphic numbers using both loop types, with explanation. print the output with this code**

**Code and Output:**

A computer screen shot of a program code

Description automatically generated

**Observation :** In this code we can Observe that the AI is not giving the Print output by default we have to say AI to print an Output .

**Task** **3**:

(Conditional Statements – Online Shopping  
Feedback Classification)  
• Task: Ask AI to write nested if-elif-else conditions to classify  
online shopping feedback as Positive, Neutral, or Negative based  
on a numerical rating (1–5).  
• Instructions:  
o Generate initial code using nested if-elif-else.  
o Analyze correctness and readability.  
o Ask AI to rewrite using dictionary-based or match-case  
structure.

**CODE**:

**A screen shot of a computer program

Description automatically generated**

**OUTPUT:**

**A screen shot of a computer program

Description automatically generated**

**OBSERVATION:** In this code we can Observe that the AI is not giving the Print by default we have to say AI to print an Output .

**Task 4** :

(Loops – Prime Numbers in a Range)  
• Task: Generate a function using AI that displays all prime  
numbers within a user-specified range (e.g., 1 to 500).  
• Instructions:  
o Get AI-generated code to list all primes using a for loop.  
o Analyze the correctness and efficiency of the prime-  
checking logic.  
o Ask AI to regenerate an optimized version (e.g., using the  
square root method).

Expected Output #4:  
• Python program that lists all prime numbers within a given range,  
with an optimized version and explanation.

**PROMPT:** (Loops – Prime Numbers in a Range)• Task: Generate a function using AI that displays all primenumbers within a user-specified range (e.g., 1 to 500).• Instructions:o Get AI-generated code to list all primes using a for loop.o Analyze the correctness and efficiency of the prime-checking logic. o Ask AI to regenerate an optimized version (e.g., using the  
square root method).

**CODE AND OUTPUT:**

**A screenshot of a computer

Description automatically generated**

**OBSERVATION:** In this code we can Observe that the AI is giving vertical output we need to say to give output horizontally.

Task Description #5 (Classes – Library System)  
• Task: Use AI to build a Library class with methods to  
add\_book(), issue\_book(), and display\_books().  
• Instructions:  
o Generate Library class code using AI.  
o Analyze if methods handle edge cases (e.g., issuing  
unavailable books).  
o Ask AI to add comments and documentation.  
Expected Output #5:  
• Library class with all methods, inline comments, and explanation.

**PROMPT**: (Classes – Library System)• Task: Use AI to build a Library class with methods to add\_book(), issue\_book(), and display\_books().• Instructions:o Generate Library class code using AI.o Analyze if methods handle edge cases (e.g., issuing  
unavailable books).o Ask AI to add comments and documentation.Expected Output #5:  
• Library class with all methods, inline comments, and explanation.

**CODE AND OUTPUT:**

A screen shot of a computer program

Description automatically generated

A screenshot of a computer program

Description automatically generated

**OBSERVATION: Inn this code we have to mention that to give output so it printed the output.**