**CLASS XI – COMPUTER SCIENCE 2023-24**

**04-09-2023**

EX.NO: 25

Riya Pahuja is a school librarian.

She wants a program to analyse pupil use of the library.

She wants to encourage reading by awarding gold, silver and bronze medals to the three pupils who have read the most books.

Test data has been included in the code file.

Open the code file **Q06** in the code editor.

Write a program to calculate and display:

• the total number and average number of books pupils have read

• the IDs of pupils who have read fewer than ten books

• the details of the gold, silver and bronze medal winners.

**Your program should function correctly even if the number of pupils in the code file is changed**.

EX.NO:26

Farshia is the regional manager for an insurance company.

She manages a team of sales staff.

She wants a program to analyse the performance of her team over a number of months.

Test data has been included in the code file.

Open the code file **Q07** in the code editor.

Write a program to:

• calculate and display the total sales made by each member of the team

• calculate and display the total sales made by the whole team

• display the first name, last name and the total sales made by the two members of the team with the highest total sales. (Ignore the possibility of two or more members of the team having the same total sales.)

**Your program should function correctly even if the number of months or number of members of the team is changed.**

EX.NO:27

Open the code file named **Q08** in the code editor.

In file **Q08**, the names and years of birth of artists are stored in a 2-dimensional data structure.

Labels for their work need to be created by joining the first letter of their last name, the first letter of their first name and their year of birth.

For example, a label for (*‘Andy’, ‘Warhol’, 1928*) would be ‘*WA1928*’.

Write a program to:

• process each artist to create a label

• store all the labels in the data structure named ‘theLabels’

• display the labels for all the artists

• find and display the name and year of birth of the youngest artist.

**Your program should function correctly, even if ‘theArtists’ data structure has more, fewer, or different artists.**

You **must** use the data structures in file **Q08**.