**NATIONAL PUBLIC SCHOOL, HSR, BANGALORE**

**Grade 12-ASSIGNMENT 3 2024 - 2025**

**COMPUTER SCIENCE**

**Instructions:-**

* ***The programs should be user friendly.***
* ***Program should have comment at the top with given information***

“””Assignment3 Question1 Done By Your Name

Date “””

* ***Program should be documented properly with necessary comments.***
* ***The program outputs should be formatted*. Make a word file and copy the output screenshots.**

***Students can take the print of the sample output.***

Q1. Consider the following declaration of a list having the values as given:-

Movie= [rating, #value between 0-10

Name,

Language]

Movies=[7.2,”Lion King”,”English”]

**Give the function definitions to do the following:**

1. Write the object Movie to a binary file.
2. Read the objects Movie from a binary file and display the records.
3. Read the objects of the Movie type from a binary file and search the record of the Movie which has the highest rating. Display the record.

Write a menu driven Python program (**Store, Display, Search and exit**) to implement the above code.

Q2. Write menu driven python program to create a binary file **(Product.dat)** storing the Dictionary Product and perform given operations. The menu options are:-

1. Add more data
2. Display All
3. Search for a product by name
4. Update the product price
5. Delete the product
6. Move certain products (by name) to a separate file.

Input the name of the file and also display its content after copy operation.

K**eys of the dictionary Product**

Pid String # product ID

Pname String # product Name

Qty integer #quantity of product

Price Float # Price per unit of the product

Q3 Write menu driven python program to create a csv file **(Emp.csv) s**toring the list of employee information like (EName, EmpID, Salary, Department) and perform given operations. The menu options are:-

1. Add more rows
2. Display All
3. Search for a particular employee
4. Display the list of all employees working in a particular department given by user.
5. Sort the employee as per their salary and display.

Q4 Write menu driven python program to create a csv file **(Travel.csv) s**toring the list of travel destination information like (PlaceName, Country , TravelCost,MiscCost) and perform given operations.

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Place | Travel Cost | Misc Cost |
| Switzerland | Lake Geveva | 145000 | 18000 |
| America | Los Angeles | 125000 | 25000 |
| Australia | Great Barrier Reef | 20000 | 12000 |

The menu options are:-

1. Add more rows.
2. Display All the records and show the total cost to visit a place.
3. Delete a particular record
4. Exit

For each Menu write separate functions