

**NATIONAL PUBLIC SCHOOL, HSR, BANGALORE**  
**Grade 12-ASSIGNMENT 3 2022 - 2023**  
**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:**

- i) Write the object Movie to a binary file.
- ii) Read the objects Movie from a binary file and display the records.
- iii) 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.

**Keys 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**) storing 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**) storing 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:-

- i) Add more rows.
- ii) Display All the records and show the total cost to visit a place.
- iii) Delete a particular record
- iv) Exit

For each Menu write separate functions