

CTA ASSIGNMENTS 2020 -2021

CLASS 10

Assignment 7:

Define a class called **Room** with the following description:

Instance variables/data members:

int **rno** – to store the room number

int **cph** – to store the phone number of the customer

String **cname** – to store the name of the customer

int **rdays** – to store the number of days the room is taken on rent

int **charge** – to calculate and store the rental charge

Member methods:

void **input()** – to input and store the detail of the customer.

void **compute()** – to compute the rental charge

The rent for a room is charged on the following basis.

First five days Rs 2000 per day;

Next five days Rs 5000 per day

Rest of the days Rs 8000 per day

void **display()** – to display the details in the following format:

Room No.	Phone No.	No. of days	Charge
_____	_____	_____	_____

Write a main method to create an object and invoke all the above methods.

Assignment 8:

Create a class MyPattern which overloads the following methods:

i) void drawPattern(int row)- Display the following pattern if row =4

```
9
8  9
7  8  9
6  7  8  9
```

ii) void drawPattern(char startCh, int r) – Display the following pattern if startCh='B' and r=3

```
      B
     B  C
    B  C  D
```

Create a main function and call both the methods, Use Method Overloading. Object creation is not mandatory.

Assignment 9:

Write a program to store name of 5 states in a single dimensional array and name of their capitals in another single dimensional array. Accept a state name from user and search in the first array. If the name of the state exists in the array, display the corresponding capital city from the second array. Otherwise display "Sorry, try again".

Sample Input:

Rajasthan	Odisha	Bihar	Tamilnadu	Karnataka
Jaipur	Bhubaneswar	Patna	Chennai	Bengaluru

Sample output:

Enter a state: Bihar

Capital: Patna

Enter a state: Kerala

Sorry, try again

Instructions to be followed:

1. All assignments must be hand-written. None of the assignment will be typed in computer. Project file paper will be used to do the assignments.
 2. Program and variable description table on rule side with black or blue pen only. White pages can be used for writing sample input and output. No other colour will be acceptable.
 3. Each assignment will be scanned as a pdf file.
 4. Following sequence will be maintained in a scanned pdf file for each assignment:
 - a) Question
 - b) Program
 - c) Sample Input and output
 - d) Variable description Table
 5. PDF File Name will be as follows:
<Registartion No><space>Assignment<no.>
Example: 2222 Samadrita Basu Assignment7
 6. Subject of the mail will be as follows:
<Registration No><space><Name><space><Assignment>7,8,9
Example: 2222 Samadrita Basu Assignment 7,8,9
 7. Please send only one mail with three attachments for three assignments.
 8. Submission date for Assignment7,8,9 will be on or before 20/09/2020
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