

EXPERIMENT 2

- ① Write a program to declare a class 'City' having data members as name & population. Accept this data for 5 cities and display the name of the city having highest population.
- ② Write a program to declare a class 'Account' having data member as Acc-no., and balance. Accept this data for 10 accounts and give interest of 10% where balance is equal or greater than 5000 and display names of staff who are "HOD" them.
- ③ Write a program to declare a class 'Staff' having data members as name and post. Accept this data for 5 staff and display names of staff who are "HOD".

```
① #include <iostream>
using namespace std;
class City
{
    int population;
    string name;
public:
    void accept()
    {
        cout << "Enter city name and population:" ;
        cin >> name >> population;
    }
```

Enter city name & population: Mumbai
20411000

Enter city name & population: Delhi
19814000

Enter city name & population: Bengaluru
12360000

Enter city name & population: Hyderabad
10400000

Enter city name & population: Pune
10000000

City with highest population

Name: Mumbai, Population: 20411000

③ #include <iostream>
using namespace std;
{
 string name;
 string past;
public:
 void accept()
 {
 cout << "Enter name & past :";
 cin >> name >> past;
 }
 void display()
 {
 if (past == "HOD")
 {
 cout << "HOD" << name << endl;
 }
 }
}

```
void display ()  
{
```

```
    cout << " Name:" << name << ", Population:" <<  
        population << endl;
```

```
}
```

```
int getpopulation ()
```

```
{
```

```
    return population;
```

```
}
```

```
{
```

```
int main ()
```

```
{
```

```
    City c[5];
```

```
    for (int i=0; i<5; i++)
```

```
{
```

```
    c[i].accept();
```

```
{
```

```
    int maxpopulation = 0;
```

```
    for (int i=1; i<5; i++)
```

```
{
```

```
    if (c[i].getpopulation () > c[maxpopulation].
```

```
        getpopulation ())
```

```
{
```

```
    maxpopulation = i;
```

```
{
```

```
{
```

```
    cout << "\n City with highest population:\n";
```

```
    c[maxpopulation].display ();
```

```
    return 0;
```

```
{
```

```
Output :
```

② #include <iostream>
using namespace std;
class Account

{

int account_no;

float balance;

public:

void accept()

{

cout << "Enter account number and balance:";

cin >> account_no >> balance;

}

void applyInterest

if (balance >= 500)

{

balance += balance * 0.10;

y

y

void display()

{

cout << "Account no. = " << account_no;

cout << "Balance = " << balance;

y y;

int main()

{

Account acc[10];

for (i=0; i<10; i++) {

acc[i].accept();

y cout << "Applying 10% Interest";

for (i=0; i<10; i++) {

acc[i].applyInterest();

acc[i].display();

y return 0; y

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```
3  
3;  
int main()  
{  
    staff s[5];  
    for (int i=0; i<5; i++)  
    {  
        cout << "\n Enter details for staff " << i+1 << "\n";  
        s[i].accept();  
    }  
    cout << "\n list of HODs \n";  
    for (int i=0; i<5; i++)  
    {  
        s[i].display();  
    }  
    return 0;  
}
```

Output :

Enter details for staff

Enter name ↴ past : Vaani
HOD

Enter name ↴ past : Rian
HOD

Enter name ↴ past : Anushka
Assistant

Enter name ↴ past : Krish
Lecturer

Enter name ↴ past : Rohan
clerk

list of HODs

HOD Vaani

HOD Rian