Practical-1

Aim: WAP to demonstrate example of default constructor or no argument constructor.

Program:

```cpp
#include<iostream>
#include<string.h>
using namespace std;

class State
{

    private:
            char State_name[100];
            char State_capital_city[100];
            char State_offical_language[100];

        public :
            State()
            {
                    strcpy(this->State_name,"Assam");
                    strcpy(this->State_capital_city,"Guwahati");
                    strcpy(this->State_offical_language,"Assamese");
            }
            void getData()
            {
                    cout <<"~> Name: "<<this->State_name <<endl
                            <<"~> Capital_city: "<<this->State_capital_city <<endl
                            <<"~> Offical language: "<<this->State_offical_language <<endl
<<endl;
            }
};

int main()
{
```
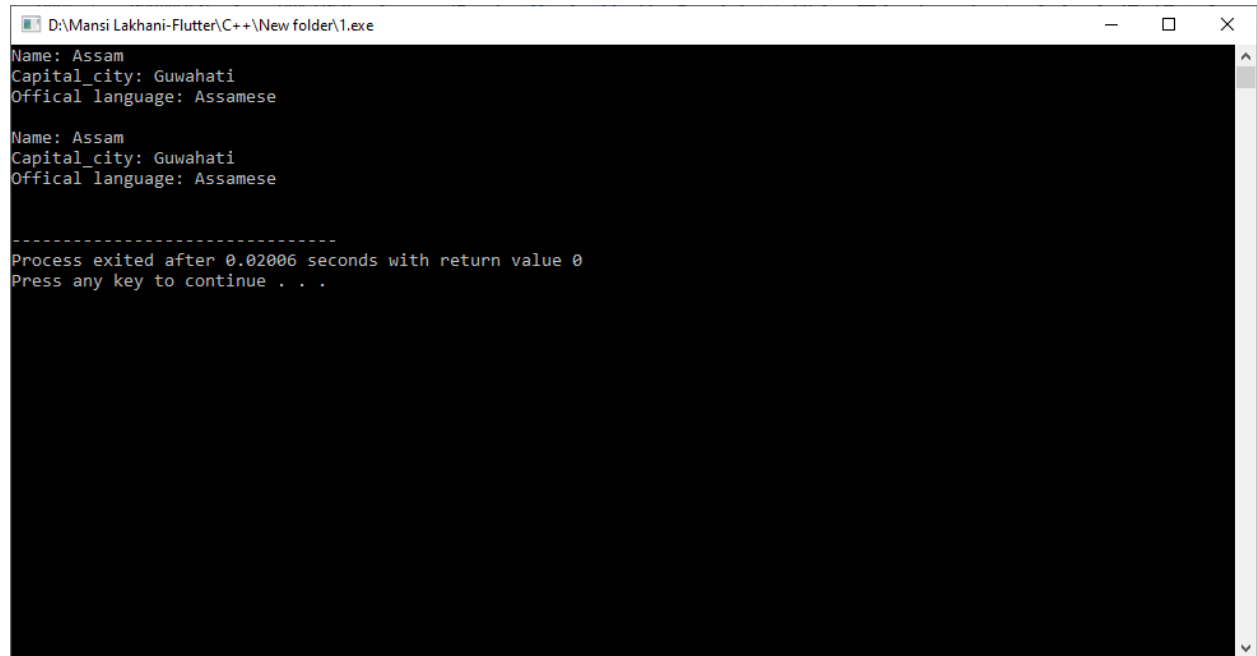
```
        State s1,s2;

        s1.getData();
        s2.getData();
        return 0;

}
```

Output:

```
D:\Mansi Lakhani-Flutter\C++\New folder\1.exe                              —    □    ×
Name: Assam
Capital_city: Guwahati
Offical language: Assamese

Name: Assam
Capital_city: Guwahati
Offical language: Assamese


--------------------------------
Process exited after 0.02006 seconds with return value 0
Press any key to continue . . .
```

Practical-2

Aim: WAP to demonstrate example of parameterized constructor.

Program:

```cpp
#include<iostream>
#include<string.h>
using namespace std;

class State
{

    private:
                char State_name[100];
                char State_capital_city[100];
                char State_offical_language[100];

        public :
                State(char name[] , char capital_city[] , char offical_language[])
                {
                        strcpy(this->State_name,name);
                        strcpy(this->State_capital_city,capital_city);
                        strcpy(this->State_offical_language,offical_language);
                }
                void getData()
                {
                        cout <<"~> Name: "<<this->State_name <<endl
                                <<"~> Capital_city: "<<this->State_capital_city <<endl
                                <<"~> Offical language: "<<this->State_offical_language <<endl
<<endl;
                }
};

int main()
{
        State s1("Assam","Guwahati","Assamese");
```
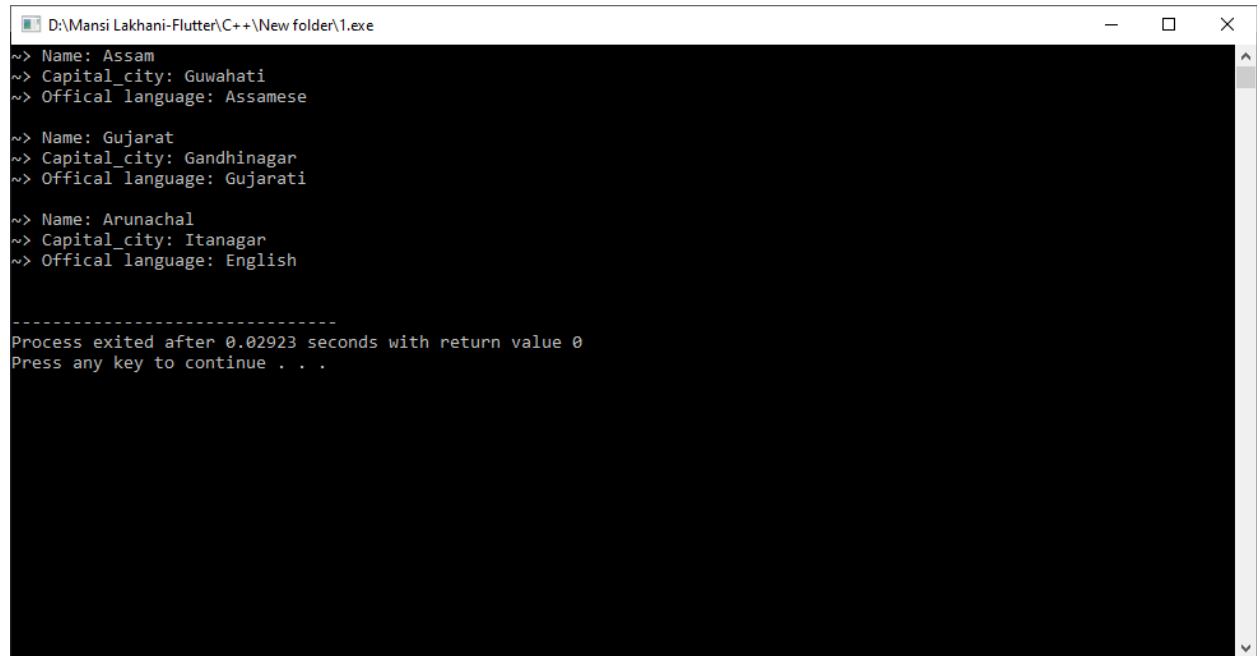
```
        State s2("Gujarat","Gandhinagar","Gujarati");
        State s3("Arunachal","Itanagar","English");

        s1.getData();
        s2.getData();
        s3.getData();
        return 0;
}
```

Output:

~> Name: Assam
~> Capital_city: Guwahati
~> Offical language: Assamese

~> Name: Gujarat
~> Capital_city: Gandhinagar
~> Offical language: Gujarati

~> Name: Arunachal
~> Capital_city: Itanagar
~> Offical language: English

Process exited after 0.02923 seconds with return value 0
Press any key to continue . . .

Practical-3

Aim: **WAP to create a class which Set values of data members using default and parameterized constructor.**

Program:

```
#include<iostream>
#include<string.h>
using namespace std;

class State
{

   private:
               char State_name[100];
               char State_capital_city[100];
               char State_offical_language[100];

       public :
               State(char name[] , char capital_city[] , char offical_language[])
               {
                       strcpy(this->State_name,name);
                       strcpy(this->State_capital_city,capital_city);
                       strcpy(this->State_offical_language,offical_language);
               }

               State ()
               {

               }

               void getData()
               {
                       cout <<"~> Name: "<<this->State_name <<endl
                               <<"~> Capital_city: "<<this->State_capital_city <<endl
```

```cpp
                                <<"~> Offical language: "<<this->State_offical_language
                                <<endl    <<endl;
            }
};

int main()
{
        State s1("Assam","Guwahati","Assamese");
        State s2("Gujarat","Gandhinagar","Gujarati");
        State s3("Arunachal","Itanagar","English");
        State s4;

        s1.getData();
        s2.getData();
        s3.getData();
         s4.getData();
        return 0;
}
```
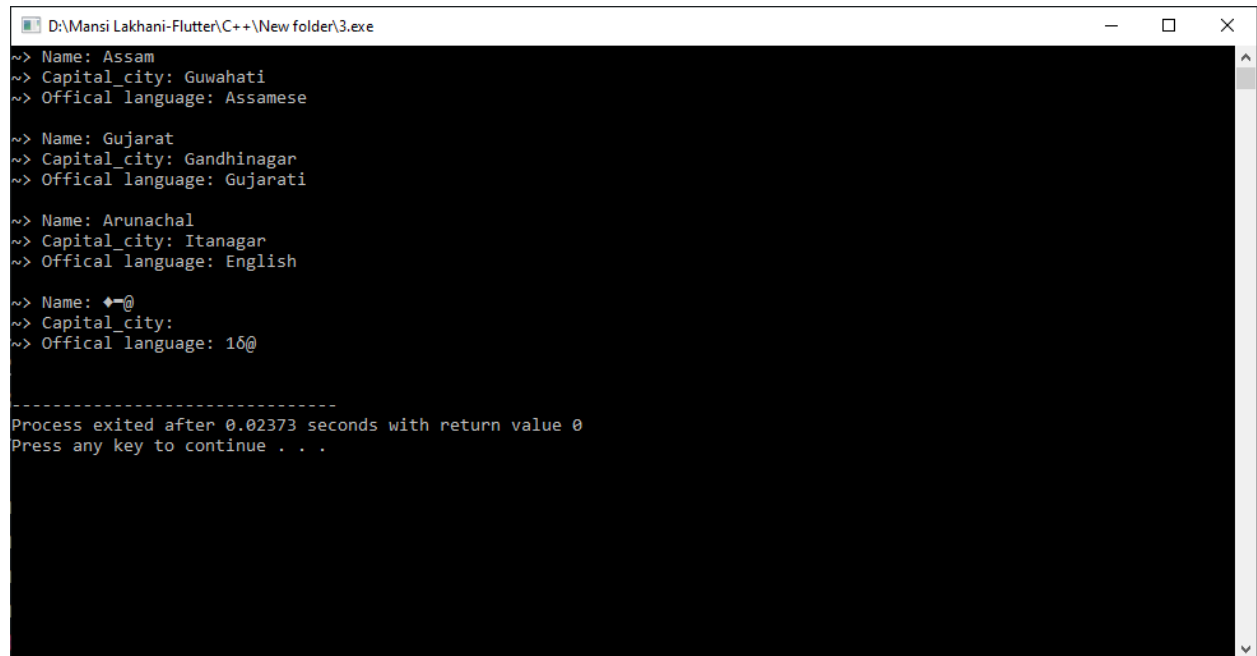
Output:

```
D:\Mansi Lakhani-Flutter\C++\New folder\3.exe                              —    □    ✕

~> Name: Assam
~> Capital_city: Guwahati
~> Offical language: Assamese

~> Name: Gujarat
~> Capital_city: Gandhinagar
~> Offical language: Gujarati

~> Name: Arunachal
~> Capital_city: Itanagar
~> Offical language: English

~> Name: ♦━@
~> Capital_city:
~> Offical language: 1δ@


--------------------------------
Process exited after 0.02373 seconds with return value 0
Press any key to continue . . .
```