P:-11

Q1

```
#include <iostream>
using namespace std;
// Inline function to perform addition
inline float addition(float a, float b)
{
return a + b;
}
// Inline function to perform subtraction
inline float subtraction(float a, float b)
{
return a - b;
}
// Inline function to perform multiplication
inline float multiplication(float a, float b)
{
return a * b;
}
// Inline function to perform division
inline float division(float a, float b)
{
if (b != 0)
return a / b;
else
{
cout << "Error: Division by zero!";
return 0;
}
}
int main()
```

```
{
float num1, num2;
// Input from user
cout << "Enter first float number: ";
cin >> num1;
cout << "Enter second float number: ";
cin >> num2;
// Perform arithmetic operations using inline functions
cout << "Addition: " << addition(num1, num2) << endl;
cout << "Subtraction: " << subtraction(num1, num2) << endl;
cout << "Multiplication: " << multiplication(num1, num2) << endl;
cout << "Division: " << division(num1, num2) << endl;
return 0;
}
```

Q2

```
#include <iostream>
#include <string>
using namespace std;
class Person {
private:
string Person_Name;
string City;
string Mob_No;
public:
// Function to accept and display Person information
void acceptDisplayInfo() {
cout << "Enter Person Name: ";
cin >> Person_Name;
cout << "Enter City: ";
cin >> City;
cout << "Enter Mobile Number: ";
```

```
cin >> Mob_No;
displayInfo();
}
// Function to display Person information
void displayInfo() {
cout << "Person Name: " << Person_Name << endl;
cout << "City: " << City << endl;
cout << "Mobile Number: " << Mob_No << endl;
}
// Function to search Person details by mobile number
void searchByMobile(string mobileNumber) {
if (mobileNumber == Mob_No) {
cout << "Person Found!\n";
displayInfo();
} else {
cout << "Person not found with given mobile number.\n";
}
}
// Function to search Person details by city
void searchByCity(string city) {
if (city == City) {
cout << "Person Found!\n";
displayInfo();
} else {
cout << "Person not found in given city.\n";
}
}
};
int main() {
Person person;
char choice;
```

```
string searchValue;
// cout << "Enter Person Information:\n";
person.acceptDisplayInfo();
cout << "\nSearch by (M)obile number or (C)ity? ";
cin >> choice;
switch (choice) {
case 'M':
case 'm':
cout << "Enter Mobile Number to search: ";
cin >> searchValue;
person.searchByMobile(searchValue);
break;
case 'C':
case 'c':
cout << "Enter City to search: ";
cin >> searchValue;
person.searchByCity(searchValue);
break;
default:
cout << "Invalid choice!\n";
}
return 0;
}
```