Assignment : 6

Q6. Create a class of calculator and perform following operations

1. Get values from user a, b
2. Create class object
3. perform Addition, Substract, Multiplication and division
4. Apply Switch case to choose operation
5. Use do while loop for continuous operation

```
#include <iostream>
using namespace std;
class Calculator {
public:
    double add(double a, double b) {
        return a + b;
    }
    double sub(double a, double b) {
        return a - b;
    }
    double multi(double a, double b) {
        return a * b;
    }
    double div(double a, double b) {
        if (b == 0) {
            cout << "Division by 0 is invalid" << endl;
            return 0.0;
        }
        else {
            return a / b;
        }
    }
    void getdata() {
        double a, b;
        char op;
        cout << "Enter the first number: ";
        cin >> a;
        cout << "Enter the second number: ";
        cin >> b;
        cout << "Enter the operation (*, /, +, -): ";
        cin >> op;
        switch (op) {
            case '+':
                cout << "Result: " << add(a, b) << endl;
                break;
            case '-':
```

```
            cout << "Result: " << sub(a, b) << endl;
            break;
        case '*':
            cout << "Result: " << multi(a, b) << endl;
            break;
        case '/':
            cout << "Result: " << div(a, b) << endl;
            break;
      }
   }
};
int main() {
   Calculator calc;
   int g = 1;
   do {
      calc.getdata();
      cout << "Do you want to perform another operation? (enter 1 for yes and 0 for no): ";
      cin >> g;
   } while (g == 1);

   return 0;
}
```

Output :

```
Enter the first number: 2
Enter the second number: 3
Enter the operation (*, /, +, -): *
Result: 6
Do you want to perform another operation? (enter 1 for yes and 0 for no): 1
Enter the first number: 576
Enter the second number: 100
Enter the operation (*, /, +, -): *
Result: 57600
Do you want to perform another operation? (enter 1 for yes and 0 for no): 1
Enter the first number: 3
Enter the second number: 0
Enter the operation (*, /, +, -): /
Result: Division by 0 is invalid
0
Do you want to perform another operation? (enter 1 for yes and 0 for no): 0
```