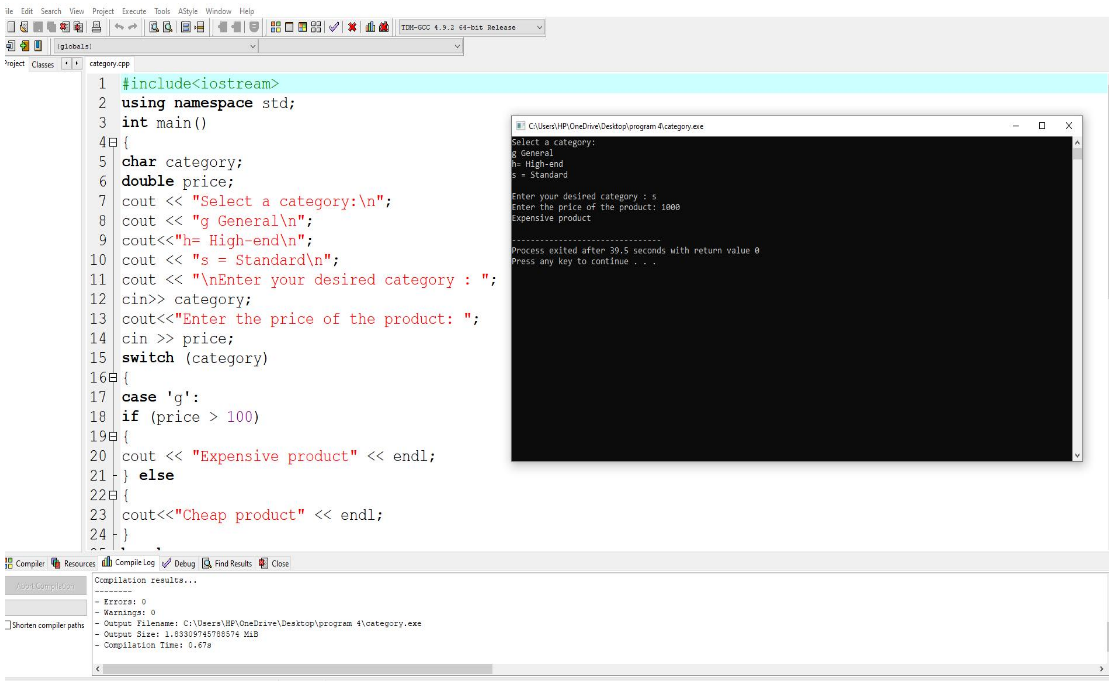
Task no 1

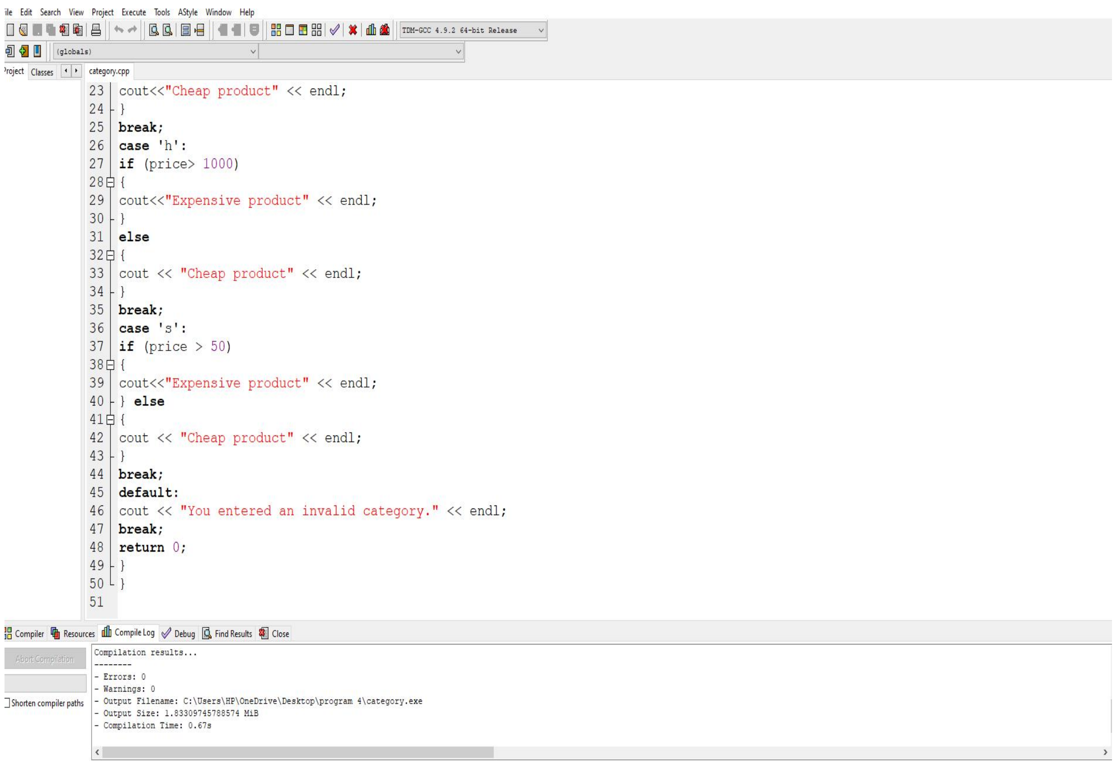


```cpp
#include<iostream>
using namespace std;
int main()
{
char category;
double price;
cout << "Select a category:\n";
cout << "g General\n";
cout<<"h= High-end\n";
cout << "s = Standard\n";
cout << "\nEnter your desired category : ";
cin>> category;
cout<<"Enter the price of the product: ";
cin >> price;
switch (category)
{
case 'g':
if (price > 100)
{
cout << "Expensive product" << endl;
} else
{
cout<<"Cheap product" << endl;
}
```

C:\Users\HP\OneDrive\Desktop\program 4\category.exe

```
Select a category:
g General
h= High-end
s = Standard

Enter your desired category : s
Enter the price of the product: 1000
Expensive product

--------------------------------
Process exited after 39.5 seconds with return value 0
Press any key to continue . . .
```

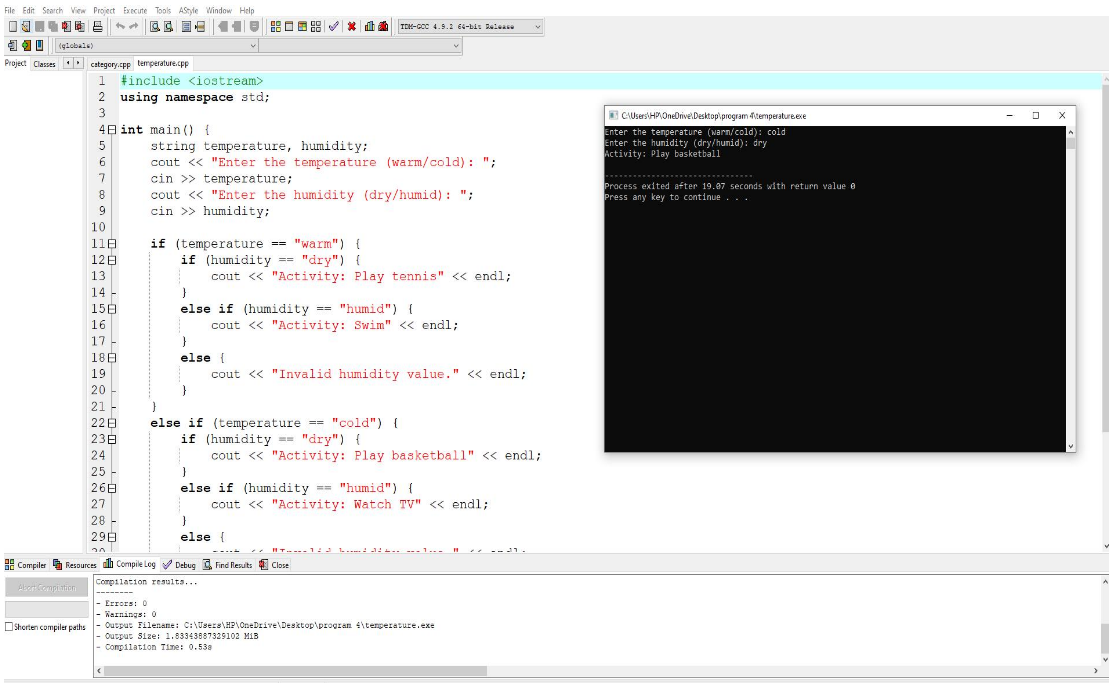
```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\category.exe
- Output Size: 1.83309745788574 MiB
- Compilation Time: 0.67s
```



```cpp
cout<<"Cheap product" << endl;
}
break;
case 'h':
if (price> 1000)
{
cout<<"Expensive product" << endl;
}
else
{
cout << "Cheap product" << endl;
}
break;
case 's':
if (price > 50)
{
cout<<"Expensive product" << endl;
} else
{
cout << "Cheap product" << endl;
}
break;
default:
cout << "You entered an invalid category." << endl;
break;
return 0;
}
}
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\category.exe
- Output Size: 1.83309745788574 MiB
- Compilation Time: 0.67s
```

Task no 2

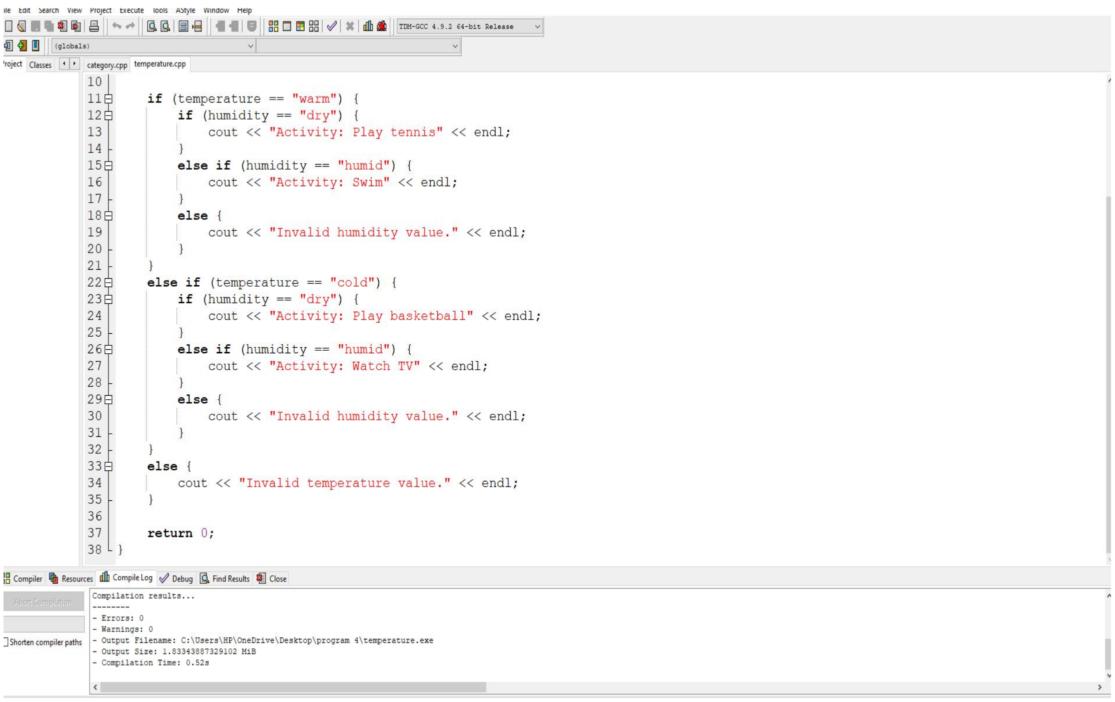


```cpp
#include <iostream>
using namespace std;

int main() {
    string temperature, humidity;
    cout << "Enter the temperature (warm/cold): ";
    cin >> temperature;
    cout << "Enter the humidity (dry/humid): ";
    cin >> humidity;

    if (temperature == "warm") {
        if (humidity == "dry") {
            cout << "Activity: Play tennis" << endl;
        }
        else if (humidity == "humid") {
            cout << "Activity: Swim" << endl;
        }
        else {
            cout << "Invalid humidity value." << endl;
        }
    }
    else if (temperature == "cold") {
        if (humidity == "dry") {
            cout << "Activity: Play basketball" << endl;
        }
        else if (humidity == "humid") {
            cout << "Activity: Watch TV" << endl;
        }
        else {
```

C:\Users\HP\OneDrive\Desktop\program 4\temperature.exe

```
Enter the temperature (warm/cold): cold
Enter the humidity (dry/humid): dry
Activity: Play basketball

--------------------------------
Process exited after 19.07 seconds with return value 0
Press any key to continue . . .
```

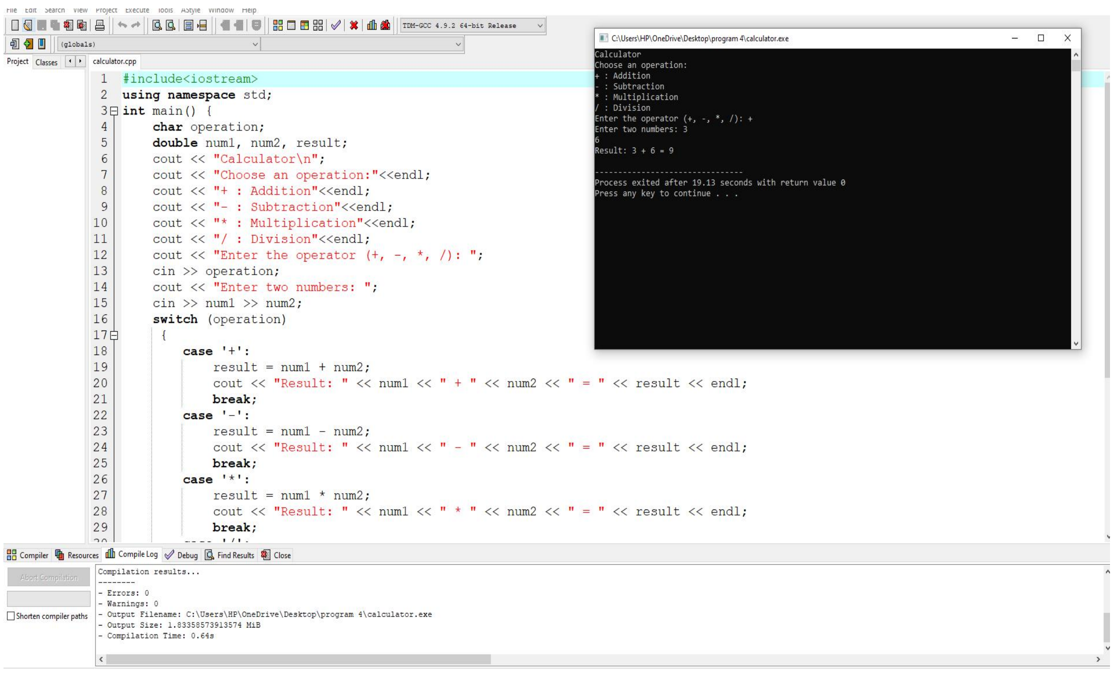
```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\temperature.exe
- Output Size: 1.83343887329102 MiB
- Compilation Time: 0.53s
```



```cpp

    if (temperature == "warm") {
        if (humidity == "dry") {
            cout << "Activity: Play tennis" << endl;
        }
        else if (humidity == "humid") {
            cout << "Activity: Swim" << endl;
        }
        else {
            cout << "Invalid humidity value." << endl;
        }
    }
    else if (temperature == "cold") {
        if (humidity == "dry") {
            cout << "Activity: Play basketball" << endl;
        }
        else if (humidity == "humid") {
            cout << "Activity: Watch TV" << endl;
        }
        else {
            cout << "Invalid humidity value." << endl;
        }
    }
    else {
        cout << "Invalid temperature value." << endl;
    }

    return 0;
}
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\temperature.exe
- Output Size: 1.83343887329102 MiB
- Compilation Time: 0.52s
```

Task no 3

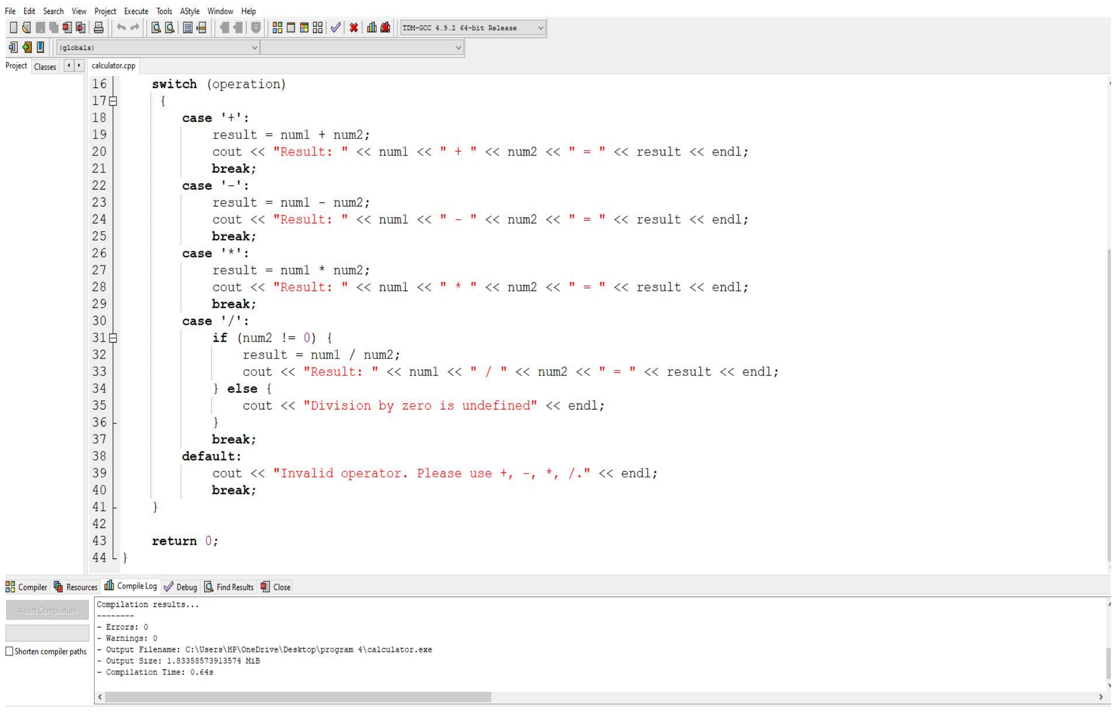


```cpp
#include<iostream>
using namespace std;
int main() {
    char operation;
    double num1, num2, result;
    cout << "Calculator\n";
    cout << "Choose an operation:"<<endl;
    cout << "+ : Addition"<<endl;
    cout << "- : Subtraction"<<endl;
    cout << "* : Multiplication"<<endl;
    cout << "/ : Division"<<endl;
    cout << "Enter the operator (+, -, *, /): ";
    cin >> operation;
    cout << "Enter two numbers: ";
    cin >> num1 >> num2;
    switch (operation)
     {
        case '+':
            result = num1 + num2;
            cout << "Result: " << num1 << " + " << num2 << " = " << result << endl;
            break;
        case '-':
            result = num1 - num2;
            cout << "Result: " << num1 << " - " << num2 << " = " << result << endl;
            break;
        case '*':
            result = num1 * num2;
            cout << "Result: " << num1 << " * " << num2 << " = " << result << endl;
            break;
```

C:\Users\HP\OneDrive\Desktop\program 4\calculator.exe

```
Calculator
Choose an operation:
+ : Addition
- : Subtraction
* : Multiplication
/ : Division
Enter the operator (+, -, *, /): +
Enter two numbers: 3
6
Result: 3 + 6 = 9

--------------------------------
Process exited after 19.13 seconds with return value 0
Press any key to continue . . .
```

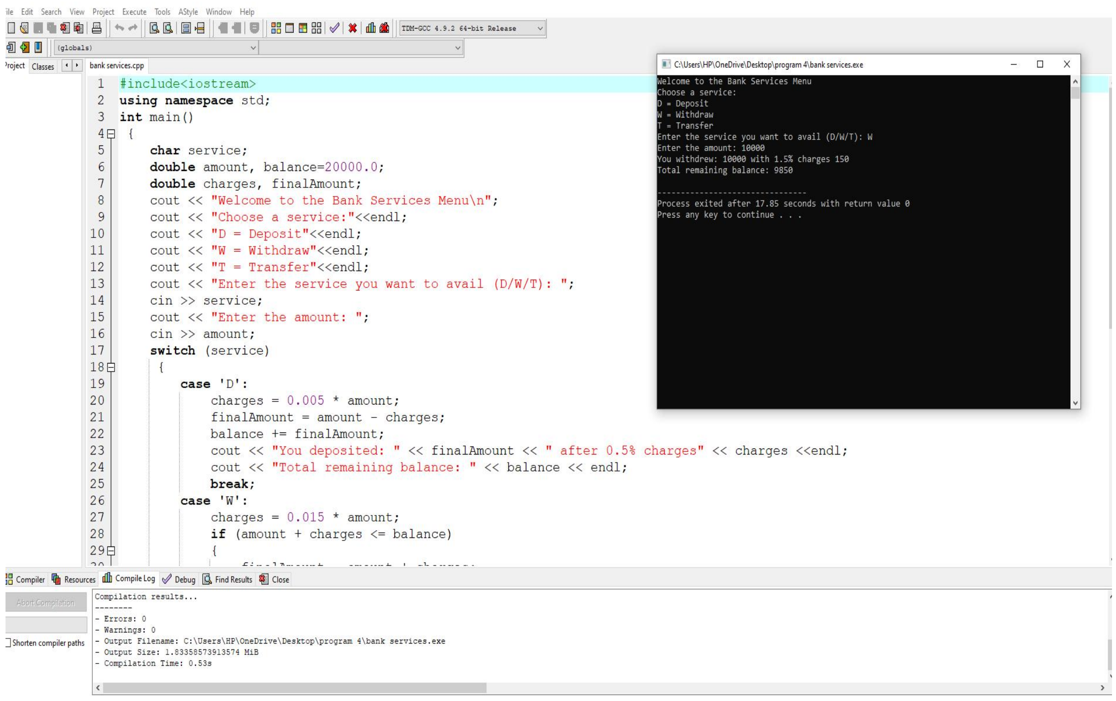
```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\calculator.exe
- Output Size: 1.83358573913574 MiB
- Compilation Time: 0.64s
```



```cpp
    switch (operation)
     {
        case '+':
            result = num1 + num2;
            cout << "Result: " << num1 << " + " << num2 << " = " << result << endl;
            break;
        case '-':
            result = num1 - num2;
            cout << "Result: " << num1 << " - " << num2 << " = " << result << endl;
            break;
        case '*':
            result = num1 * num2;
            cout << "Result: " << num1 << " * " << num2 << " = " << result << endl;
            break;
        case '/':
            if (num2 != 0) {
                result = num1 / num2;
                cout << "Result: " << num1 << " / " << num2 << " = " << result << endl;
            } else {
                cout << "Division by zero is undefined" << endl;
            }
            break;
        default:
            cout << "Invalid operator. Please use +, -, *, /." << endl;
            break;
     }

    return 0;
}
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\calculator.exe
- Output Size: 1.83358573913574 MiB
- Compilation Time: 0.64s
```

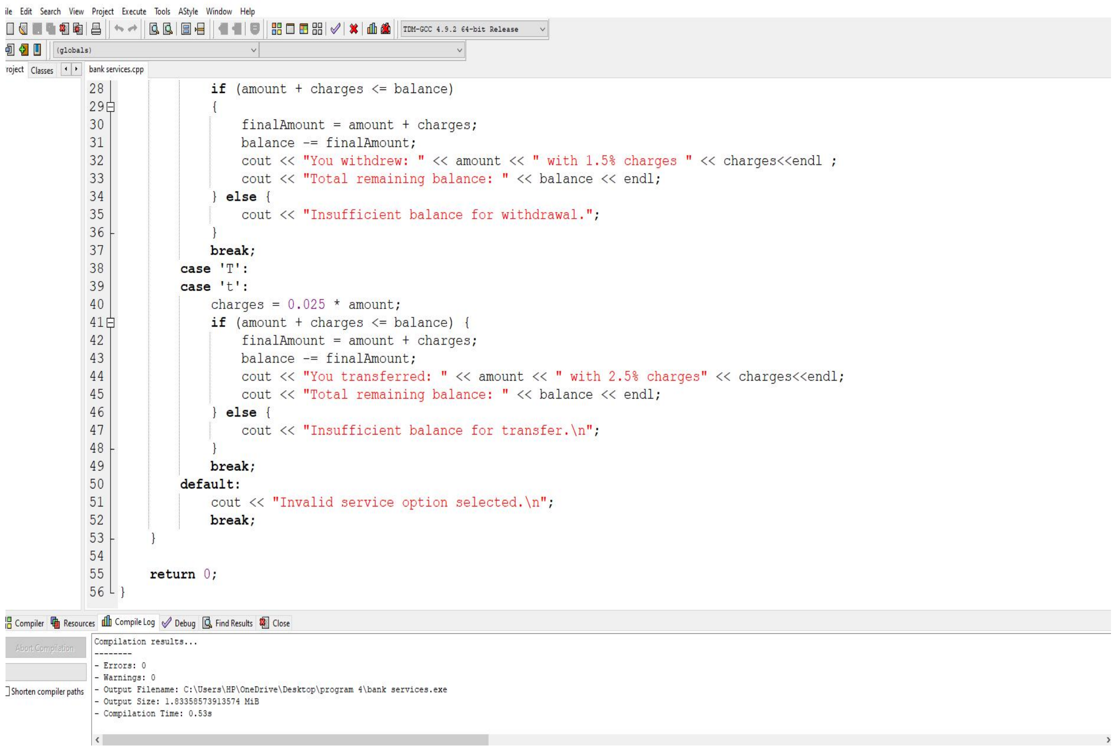
Task no 4



```cpp
#include<iostream>
using namespace std;
int main()
{
    char service;
    double amount, balance=20000.0;
    double charges, finalAmount;
    cout << "Welcome to the Bank Services Menu\n";
    cout << "Choose a service:"<<endl;
    cout << "D = Deposit"<<endl;
    cout << "W = Withdraw"<<endl;
    cout << "T = Transfer"<<endl;
    cout << "Enter the service you want to avail (D/W/T): ";
    cin >> service;
    cout << "Enter the amount: ";
    cin >> amount;
    switch (service)
     {
        case 'D':
            charges = 0.005 * amount;
            finalAmount = amount - charges;
            balance += finalAmount;
            cout << "You deposited: " << finalAmount << " after 0.5% charges" << charges <<endl;
            cout << "Total remaining balance: " << balance << endl;
            break;
        case 'W':
            charges = 0.015 * amount;
            if (amount + charges <= balance)
            {
```

```
C:\Users\HP\OneDrive\Desktop\program 4\bank services.exe
Welcome to the Bank Services Menu
Choose a service:
D = Deposit
W = Withdraw
T = Transfer
Enter the service you want to avail (D/W/T): W
Enter the amount: 10000
You withdrew: 10000 with 1.5% charges 150
Total remaining balance: 9850

--------------------------------
Process exited after 17.85 seconds with return value 0
Press any key to continue . . .
```

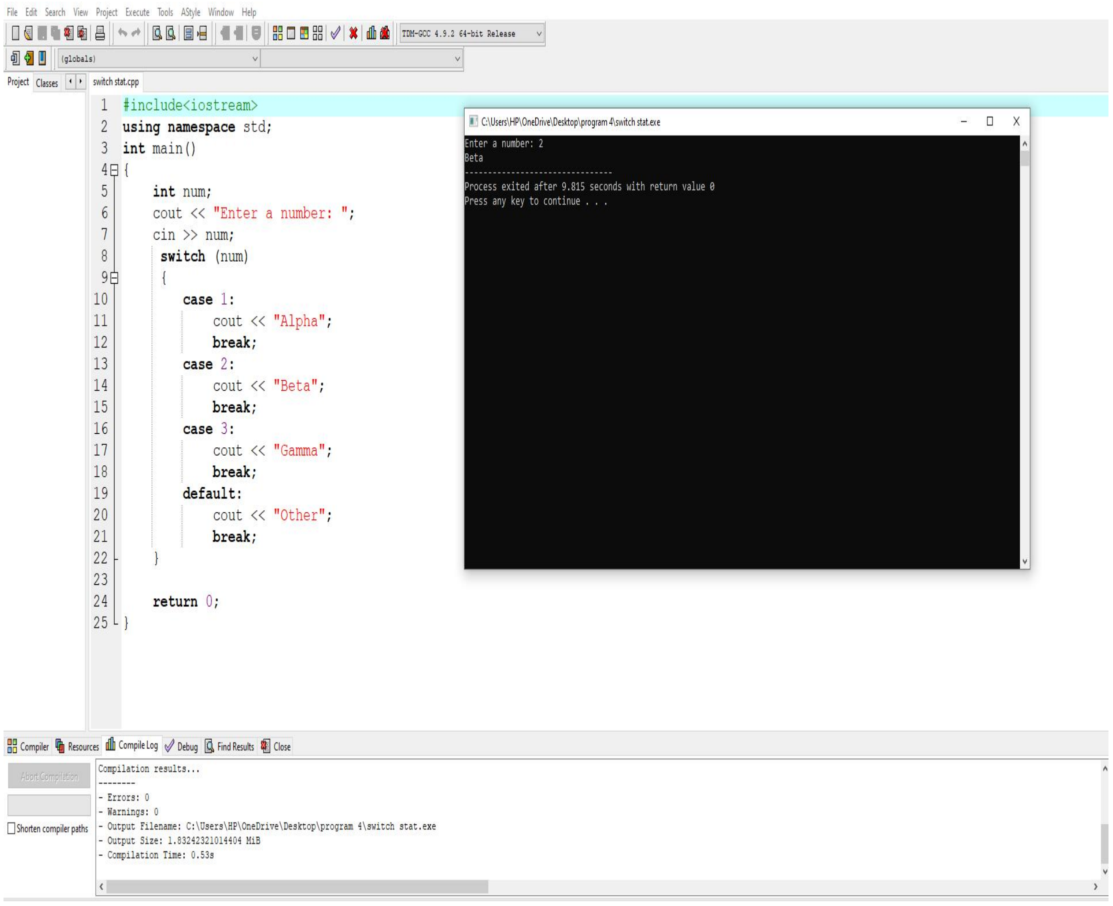
```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\bank services.exe
- Output Size: 1.83358573913574 MiB
- Compilation Time: 0.53s
```



```cpp
            if (amount + charges <= balance)
            {
                finalAmount = amount + charges;
                balance -= finalAmount;
                cout << "You withdrew: " << amount << " with 1.5% charges " << charges<<endl ;
                cout << "Total remaining balance: " << balance << endl;
            } else {
                cout << "Insufficient balance for withdrawal.";
            }
            break;
        case 'T':
        case 't':
            charges = 0.025 * amount;
            if (amount + charges <= balance) {
                finalAmount = amount + charges;
                balance -= finalAmount;
                cout << "You transferred: " << amount << " with 2.5% charges" << charges<<endl;
                cout << "Total remaining balance: " << balance << endl;
            } else {
                cout << "Insufficient balance for transfer.\n";
            }
            break;
        default:
            cout << "Invalid service option selected.\n";
            break;
     }

    return 0;
}
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\bank services.exe
- Output Size: 1.83358573913574 MiB
- Compilation Time: 0.53s
```

Task no 5



```cpp
#include<iostream>
using namespace std;
int main()
{
    int num;
    cout << "Enter a number: ";
    cin >> num;
     switch (num)
     {
        case 1:
            cout << "Alpha";
            break;
        case 2:
            cout << "Beta";
            break;
        case 3:
            cout << "Gamma";
            break;
        default:
            cout << "Other";
            break;
    }

    return 0;
}
```

C:\Users\HP\OneDrive\Desktop\program 4\switch stat.exe

```
Enter a number: 2
Beta
--------------------------------
Process exited after 9.815 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\HP\OneDrive\Desktop\program 4\switch stat.exe
- Output Size: 1.83242321014404 MiB
- Compilation Time: 0.53s
```