

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

int main() {
    cout << "Program by Muhammad Talha Khan\n";
    cout << "SAP ID: 72526\n\n";

    int num1, num2, temp;

    cout << "Enter your first number = ";
    cin >> num1;

    cout << "Enter your second number = ";
    cin >> num2;

    // Swapping logic
    temp = num1;
    num1 = num2;
    num2 = temp;

    cout << "The values after swapping are:\n";
    cout << "The value of first number = " << num1 << endl;
    cout << "The value of second number = " << num2 << endl;
}
```

✓ No issues found

```
Microsoft Visual Studio Debug Console

Program by Muhammad Talha Khan
SAP ID: 72526

Enter your first number = 3
Enter your second number = 4
The values after swapping are:
The value of first number = 4
The value of second number = 3

D:\New folder\LAB TASK 5\x64\Debug\LAB TASK 5.exe (process 2884) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
(Global Scope)

#include <iostream>
using namespace std;

int main() {
    cout << "Program by Muhammad Talha Khan\n";
    cout << "SAP ID: 72526\n\n";

    int sub1, sub2, sub3;
    cout << "Enter marks of three subjects: ";
    cin >> sub1 >> sub2 >> sub3;

    float average = (sub1 + sub2 + sub3) / 3.0;

    if (average > 60)
        cout << "You are pass\n";
    else
        cout << "You are fail\n";

    return 0;
}
```

```
Microsoft Visual Studio Debug Console

Program by Muhammad Talha Khan
SAP ID: 72526

Enter marks of three subjects: 69
89
56
You are pass

D:\New folder\LAB TASK 5\x64\Debug\LAB TASK 5.exe (process 7208) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
(Global Scope)

#include <iostream>
using namespace std;

int main() {
    cout << "Program by Muhammad Talha Khan\n";
    cout << "SAP ID: 72526\n\n";

    int num;
    cout << "Enter a number: ";
    cin >> num;

    if (num % 2 == 0)
        cout << "The number is even\n";
    else
        cout << "The number is odd\n";

    return 0;
}
```

```
Microsoft Visual Studio Debug Console

Program by Muhammad Talha Khan
SAP ID: 72526

Enter a number: 56
The number is even

D:\New folder\LAB TASK 5\x64\Debug\LAB TASK 5.exe (process 5524) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

```
5 (Global Scope)

#include <iostream>
using namespace std;

int main() {
    cout << "Program by Muhammad Talha Khan\n";
    cout << "SAP ID: 72526\n\n";

    int num;
    cout << "Enter a number: ";
    cin >> num;

    if (num > 0)
        cout << "The number is positive\n";
    else if (num < 0)
        cout << "The number is negative\n";
    else
        cout << "The number is zero\n";

    return 0;
}
```

Microsoft Visual Studio Debug Console

Program by Muhammad Talha Khan  
SAP ID: 72526

Enter a number: 78  
The number is positive

D:\New folder\LAB TASK 5\x64\Debug\LAB TASK 5.exe (process 8244) exited with code 0 (0x0).  
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Statement :- Write a program that input two numbers and find if the second number is square of first number.

Solution :-

```
#include <iostream>
using namespace std;
int main () {
    double num1, num2;
    cout << "Enter the first number: ";
    cin >> num1;
    cout << "Enter the second number: ";
    cin >> num2;
    if (num2 == num1 * num1) {
        cout << "Yes the second number is square
        of first number.";
    }
    else {
        cout << "No the second number is not
        square of first number";
    }
    return 0;
}
```



```

    cout << "Enter a number: ";
    cin >> num;
    if (num > 0) {
        cout << "The number is positive." << endl;
    } else if (num < 0) {
        cout << "The number is negative." << endl;
    } else {
        cout << "The number is zero." << endl;
    }
    return 0;
}

```

Statement 4:- "Write a program that input three numbers and displays maximum numbers."

Solution :-

```

#include <iostream>
using namespace std;
int main () {
    int a, b, c;
    cout << "Enter three numbers: ";
    cin >> a >> b >> c;
    int max = a;
    if (b > max) max = b;
    if (c > max) max = c;
    cout << "The maximum number is: " << endl;
    return 0;
}

```

② Statement:- "Write a program that input numbers and find whether it is even or odd."

Solution:-

```
#include <iostream>
using namespace std;
int main() {
    int num;
    cout << "Enter a number: ";
    cin >> num;
    if (num % 2 == 0) {
        cout << "The number is even." << endl;
    } else {
        cout << "The number is odd." << endl;
    }
    return 0;
}
```

Statement 3:-

"Write a program that inputs number and tell its positive, negative or zero."

Solution:-

```
#include <iostream>
using namespace std;
int main() {
    int num;
```



Step 1 :-

Write a program that input  
two numbers and display their values  
after swapping them.

Soln :-

#include <iostream>

using namespace std;

int main () {

int num1, num2, temp;

cout << "Enter your first number: ";

cin >> num1;

cout << "Enter your second number: ";

cin >> num2;

temp = num1;

num1 = num2;

num2 = temp;

cout << "The values of first number becomes " << num1 << endl;

cout << "The values of second number becomes " << num2 << endl;

}

return 0;

}



NAME :- M. Jalha Khan  
SAP ID :- 72526.

① Statement :- "

Write a program that  
input marks of - three subjects. If the average  
of marks are more than 80 it displays  
two messages "You are above standard" and  
"Admission granted".

Solution :-

```
#include <iostream>
using namespace std;
int main () {
    int sub1, sub2, sub3;
    float average;

    cout << "Enter marks for subject 1: ";
    cin >> sub1;
    cout << "Enter marks for subject 2: ";
    cin >> sub2;
    cout << "Enter marks for subject 3: ";
    cin >> sub3;

    average = (sub1 + sub2 + sub3) / 3;
    if (average > 80) {
        cout << "You are pass << endl;
        cout << "Admission granted" << endl;
    }
    return 0;
}
```

```
Microsoft Visual Studio Debug Console
Program by Muhammad Talha Khan
SAP ID: 72526

Enter a number: 12
The number is positive

D:\New folder\LAB TASK 5\x64\Debug\LAB TASK 5.exe (process 9424) exited with code 0 (0x0).
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```

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

int main() {
    int a, b, c;

    cout << "Enter three numbers (a, b, c): ";
    cin >> a >> b >> c;

    int maxNum;
    if (a >= b && a >= c) {
        maxNum = a;
    }
    else if (b >= a && b >= c) {
        maxNum = b;
    }
    else {
        maxNum = c;
    }
    cout << "The maximum number is: " << maxNum << endl;

    cout << "Name: Muhammad Talha Khan" << endl;
    cout << "SAP ID:72526" << endl;

    return 0;
}
```

```

#include <iostream>
using namespace std;

int main() {
    int a, b, c;

    cout << "Enter three numbers (a, b, c): ";
    cin >> a >> b >> c;

    int maxNum;
    if (a >= b && a >= c) {
        maxNum = a;
    }
    else if (b >= a && b >= c) {
        maxNum = b;
    }
    else {
        maxNum = c;
    }
    cout << "The maximum number is: " << maxNum << endl;

    cout << "Name: Muhammad Talha Khan" << endl;
    cout << "SAP ID:72526" << endl;

    return 0;
}

```

Microsoft Visual Studio Debug Console

Enter three numbers (a, b, c): 2  
3

The maximum number is: 6

Name: Muhammad Talha Khan

SAP ID:72526

\\New folder\\LAB TASK 5\\x64\\Debug\\LAB TASK 5.exe (process 2384) exited with code 0 (0x0).

> automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.

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