

**Name: Fakhir Ashar Chaudhry**

**SAP\_ID: 72990**

**PROGRAM: BS-AI**

```
//Write a program that inputs 2 numbers, swaps their values and then displays them.

#include <iostream>
using namespace std;
int main()
{
    cout<<"SAP_ID: 72990"<<endl<<"Name: Fakhir Ashar Chaudhry"<<endl;
    int num1,num2,sw;
    cout<<"Enter your first number="<<endl;
    cin>>num1;
    cout<<"Enter your second number="<<endl;
    cin>>num2;
    cout<<"The values after swapping are"<<endl;
    sw=num1;
    num1=num2;
    num2=sw;
    cout<<"The value of first number="<<num1<<endl;
    cout<<"The value of second number="<<num2<<endl;

    return 0;
}
```

```
SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter your first number=
5
Enter your second number=
6
The values after swapping are
The value of first number=6
The value of second number=5
```

```

/* Write a program that input marks of three subjects, if the average of marks is more than 80
it display two messages "You are above standard" and "Admission Granted". */

#include <iostream>
using namespace std;
int main()
{
    cout<<"SAP_ID: 72990"<<endl<<"Name: Fakhir Ashar Chaudhry"<<endl;
    double m1,m2,m3,avg;
    cout<<"Enter marks of 3 subjects:"<<endl;
    cin>>m1>>m2>>m3;
    avg=(m1+m2+m3)/3;
    if (avg>80)
    {
        cout<<"You are above standard."<<endl;
        cout<<"Admission Granted.";
    }

    return 0;
}

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter marks of 3 subjects:
89.5
100
79
You are above standard.
Admission Granted.

```

```

/* Write a program that input two numbers and finds if second number is square of first number. */

#include <iostream>
using namespace std;
int main()
{
    cout<<"SAP_ID: 72990"<<endl<<"Name: Fakhir Ashar Chaudhry"<<endl;
    double m1,m2;
    cout<<"Enter 2 numbers:"<<endl;
    cin>>m1>>m2;

    if (m2==m1*m1)
    {
        cout<<m2<<" is square of "<<m1<<endl;
    }

    else
    {
        cout<<m2<<" is not a square of "<<m1<<endl;
    }

    return 0;
}

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter 2 numbers:
5
25
25 is square of 5

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter 2 numbers:
5
6
6 is not a square of 5

```

```

/* Write a program that input a number and find wheather the number is even or odd. */

#include <iostream>
using namespace std;
int main()
{
    cout<<"SAP_ID: 72990"<<endl<<"Name: Fakhir Ashar Chaudhry"<<endl;
    int m1;
    cout<<"Enter a number:"<<endl;
    cin>>m1;

    if (m1%2==0)
    {
        cout<<m1<<" is an even number."<<endl;
    }

    else
    {
        cout<<m1<<" is an odd number.";
    }

    return 0;
}

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter a number:
5
5 is an odd number.

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter a number:
4
4 is an even number.

```

```

/* Write a program that input a number and determine it is positive , negative or 0. */

#include <iostream>
using namespace std;
int main()
{
    cout<<"SAP_ID: 72990"<<endl<<"Name: Fakhir Ashar Chaudhry"<<endl;
    int m1;
    cout<<"Enter a number:"<<endl;
    cin>>m1;

    if (m1>0)
        cout<<m1<<" is positive."<<endl;

    else if(m1<0)
        cout<<m1<<" is negative."<<endl;

    else
        cout<<m1<<" is zero."<<endl;
    return 0;
}

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter a number:
2
2 is positive.

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter a number:
-5
-5 is negative.

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter a number:
0
0 is zero.

```

```

/*Write a program that input three numbers and display maximum number. */

#include <iostream>
using namespace std;
int main()
{
    cout<<"SAP_ID: 72990"<<endl<<"Name: Fakhir Ashar Chaudhry"<<endl;
    int num1,num2,num3;
    cout<<"Enter 3 numbers:"<<endl;
    cin>>num1>>num2>>num3;

    if (num1>num2)
    {
        if(num1>num3)
            cout<<num1<<" is the maximum number";
    }

    else if ((num2>num1))
    {
        if(num2>num3)
            cout<<num2<<" is the maximum number";
    }

    else
        cout<<num3<<" is the maximum number";

    return 0;
}

```

```

SAP_ID: 72990
Name: Fakhir Ashar Chaudhry
Enter 3 numbers:
100
80
56
100 is the maximum number

```