**OBJECT ORIENTED CONCEPT & PROGRAMMING**

**(SE-201) LAB-4**

**TAQI HAIDER\_CSIT\_SECTION:B\_ROLL#CT-22092**

**Exercise:-**

**Q1:-**

#include<iostream>

using namespace std;

void factorial(int \*x){

    int result=1;

    for(int i=1;i<=\*x;i++){

        result \*=i;

    }

    cout<<"The Factorial of "<<\*x<<" is : "<<result<<endl;

}

int main(){

    int x;

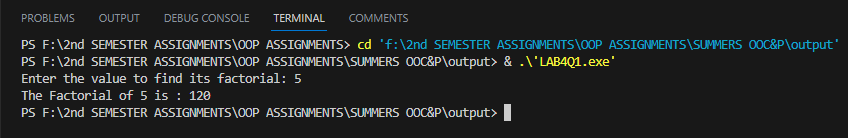
    cout<<"Enter the value to find its factorial: ";

    cin>>x;

    factorial(&x);

    return 0;

}



**Q2:-**

#include<iostream>

using namespace std;

void sum(int \*arr1,int \*arr2,int \*sum,int size){

    for(int i=0;i<size;i++){

        sum[i]=arr1[i]+arr2[i];

    }

    cout<<"The sum of arr is:"<<endl;

    cout<<"{ ";

    for(int i=0;i<size;i++){

        cout<<sum[i]<<" ";

    }

    cout<<"}";

}

int main(){

    int size;

    cout<<"Enter the size of both the array at a time:"<<endl;

    cin>>size;

    int result[size];

    int arr1[size], arr2[size];

    cout<<"Enter "<<size<<" elements of arr1:"<<endl;

    for(int i=0;i<size;i++){

        cin>>arr1[i];

    }

    cout<<"Enter "<<size<<" elements of arr2:"<<endl;

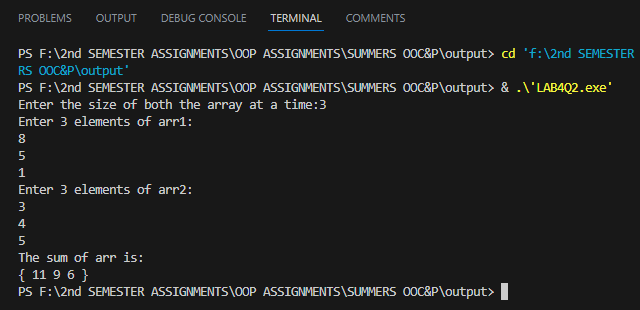
    for(int i=0;i<size;i++){

        cin>>arr2[i];

    }

    sum(arr1,arr2,result,size);

}



**Q3 :-**

#include<iostream>

using namespace std;

void circle\_Area(double \*r,double pi){

    double Area;

    Area=pi \* \*r \* \*r;

    cout<<"The Area of a circle is: "<<Area<<endl;

}

int main(){

    const double pi=3.142;

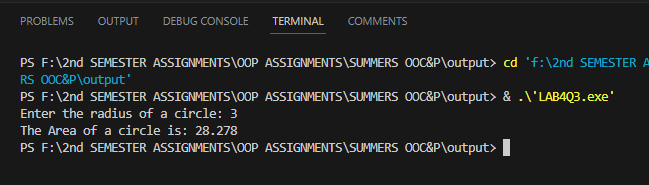
    double r;

    cout<<"Enter the radius of a circle: ";

    cin>>r;

    circle\_Area(&r,pi);

}



**Q4:-**

#include<iostream>

using namespace std;

void table(int \*x){

    for(int i=1;i<=10;i++){

        cout<<\*x<<" \* "<<i<<" = "<<\*x \* i<<endl;

    }

}

int main(){

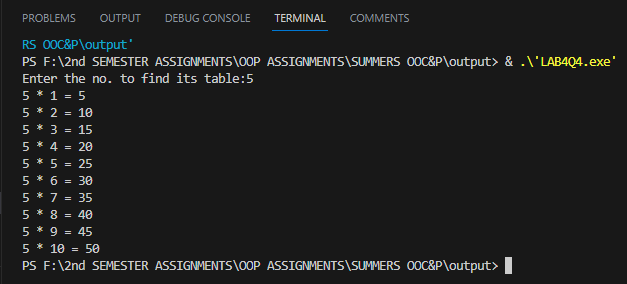
    int x;

    cout<<"Enter the no. to find its table:";

    cin>>x;

    table(&x);

}

****

**Q5:-**

#include<iostream>

using namespace std;

class calculator{

    double x ,y;

    public:

    calculator():x(0.0),y(0.0){}

    void add(double \*x,double \*y){

        cout<<"The Addition of "<<\*x<<" + "<<\*y<<" is: "<<\*x + \*y<<endl;

    }

    void sub(double \*x,double \*y){

        cout<<"The Subtraction of "<<\*x<<" - "<<\*y<<" is: "<<\*x - \*y<<endl;

    }

    void mult(double \*x,double \*y){

        cout<<"The Multiplication of "<<\*x<<" \* "<<\*y<<" is: "<<\*x \* \*y<<endl;

    }

    void div(double \*x,double \*y){

        cout<<"The Divison of "<<\*x<<" / "<<\*y<<" is: "<<\*x / \*y<<endl;

    }

};

int main(){

    calculator c;

    double x,y;

    cout<<"Enter the First number:";

    cin>>x;

    cout<<"Enter the Second number:";

    cin>>y;

    c.add(&x,&y);

    c.sub(&x,&y);

    c.mult(&x,&y);

    c.div(&x,&y);

}

