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مجموعه / 4

Sheet 3

Program No. 1

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Program No. 2

The result is 8

Program No. 3

Enter first value :10
Enter second value :20
The sum is 30

Program No. 4

Enter the value of the radius : 10
The area = 314
The circum = 62.8

Program No. 5

Enter first value :10
Enter second value :20
The sum is 30
The subtraction is -10
The multiplication is 200
The division is 0.5

Program No. 5

x=2, y=6, z=14

Program No. 6

Previous=99, Next=101

Program No. 7

6

5

Program No. 8

Please type a number: 5
5! = 120

Exercise 1:

```
#include <iostream>
#include <math.h>
using namespace std;
float area (float a, float b, float c)
{
  float area , s;
  s = (a+b+c)/2;
  area = sqrt(s*(s-a)*(s-b)*(s-c));
  return area;
}
void main () {
        float num1 , num2 , num3;
        cout<<"enter your three edges of tringles \n";
        cin>>num1>>num2>>num3;
        cout<<"The Area of Tringles Is: "<<area(num1,num2,num3)<<endl;
}
```

Exercise 2:

```
#include <iostream>
#include <math.h>
using namespace std;

float calc (float a, float b)
{
  int added , mutiplied;
  added = a + 2;
  mutiplied = b * 2;
  cout<<"The Frist Number Added by 2 Is: "<<added<<endl;
  cout<<"The Frist Number Multiplied by 2 Is: "<<mutiplied<<endl;
  return 0 ;
}
void main () {
        float num1 , num2 ;
        cout<<"enter Two Numbers \n";
        cin>>num1>>num2;
        calc(num1,num2);
}
```

Exercise 3:

```
#include <iostream>
#include <math.h>
using namespace std;

float factorial (int x)
{
  int factorial = 1;
  for(int i = 1; i <=x; ++i){
       factorial *= i;
}
  return factorial;
}
float calc (float a, float b)
{
  float n, r , equation;
  n = factorial(a);
  r = factorial(b);

  equation = n/(r*factorial(a-b));

  return equation;
}
void main () {
        float num1 , num2 ;
        cout<<"enter Two Numbers \n";
        cin>>num1>>num2;
        calc(num1,num2);

}
```

Exercise 4:

```
#include <iostream>
#include <math.h>
using namespace std;

void calc (int integer)
{
        int even=0 , odd=0 , igonre=0 ;

        for (int i = 1; i <= 7; i++)
        {
                cin>>integer;
                if (integer%2==0){
                        even++;
                }else if(integer < 1) {
                        igonre++;
                }else{
                        odd++;
                }
        }
```

```
        cout<<"Even = " <<even<<endl;
        cout<<"Odd = " <<odd<<endl;
        cout<<"There were " <<even<<" Even numbers "<<odd<<" odd numbers and "<<igonre<<" numbers was
igonred"<<endl;
}
void main () {
        float num;
        cout<<"enter your 8 Inputs numbers [sequence] \n";
        cin>>num;
        calc(num);
}
```

Exercise 5:

```
#include <iostream>
#include <math.h>
using namespace std;

void calc (int n1 , int n2) {
        int sum , factorial=1;

        sum = n1+n2;
        for(int i = 1; i <=n2; ++i){
    factorial *= i;
                }

        cout <<"the sum of these number is "<<sum<<endl;
        cout<<"The factorial Of frist Number is " <<factorial<<endl;
}
void main (){
        float num1 , num2;
        cout<<"enter Two Number \n";
        cin>>num1>>num2;
        calc(num1,num2);

}
```

Exercise 6:

```
#include <iostream>
#include <math.h>
using namespace std;

void sum_from_to (int frist , int last) {
        int sum = 0;

        for(int i = frist; i <=last; ++i){
            sum += i;
        }       }

        cout<<sum<<endl;
}
```

```
void main (){
	float num1 , num2;
	cout<<"enter Two Number \n";
	cin>>num1>>num2;
	sum_from_to(num1,num2);
}
```

Exercise 7:

```
#include <iostream>
#include <math.h>
using namespace std;

void g_c_d (int n1 , int n2) {
	if (n1 > 0 && n2 > 0){
		int gcd;
		for (int i = 1; i <= n1 && i <= n2; i++){
		  if (n1 % i == 0 && n2 % i == 0)
			gcd = i;
		}
		cout<<gcd<<endl;
	}else{
		cout<<"0"<<endl;
	}

}
void main (){
	float num1 , num2;
	cout<<"enter Two Number \n";
	cin>>num1>>num2;
	g_c_d(num1,num2);

}
```

Exercise 8:

```
#include <iostream>
#include <math.h>
using namespace std;
void swap_floats (float n1 , float n2) {

   float temp;
   temp = n1;
   n1 = n2;
   n2 = temp;
  cout << n1 << " " << n2 << endl;
}
void main (){

	float x = 5.8, y = 0.9;
	swap_floats (x, y);

}
```

Exercise 9:

```
#include <iostream>
#include <math.h>
using namespace std;

int smallest (float n1 , float n2) {

	if(n1 > n2){
		return n2;
	}else{
		 return n1;
	}

}
void main (){

	float num1 , num2 ;
	cout<<"enter Two number \n";
	cin>>num1>>num2;
	cout<<"The Smallest Number Is : "<<smallest(num1, num2)<<endl;
}
```

Exercise 10:

```
#include <iostream>
#include <math.h>
using namespace std;

void check (int n1 ) {

	if(n1%2==0){
		cout<<"The Number Is even \n";
	}else{
		 cout<<"The Number Is odd \n";
	}

}
void main (){

	float num1 ;
	cout<<"enter your number \n";
	cin>>num1;
	check(num1);
}
```