lab task 05 submission

lab task 01

```
#include <iostream>
using namespace std;
int main()
{
    int x=1;
    do {
        cout<<"enter a number";
        cin>>x;
    }
    while(x>0);
```

```
enter a number 4
enter a number7
enter a number89
enter a number0

Process exited after 10.27 seconds with return value 0
Press any key to continue . . .
```

}

```
#include <iostream>
using namespace std; int
main()
{
        double num1,num2,sum,sub,mult,div; char
operation, decision;
               do{
                cout<<"enter any two numbers you want to perform calculations with ";
        cin>>num1>>num2;
cout<<"enter"<<endl; cout<<"a for addition</pre>
"<<endl;
                cout<<"s for subtraction"<<endl;</pre>
cout<<"m for multiplication"<<endl; cout<<"d</pre>
for division"<<endl; cin>>operation;
                if (operation=='a'){
                sum=num1+num2;
                cout<<"sum is equal to "<<sum<<endl;</pre>
                }
                else if(operation=='s'){
                        sub=num1-num2;
                        cout<<"subtraction is equal to "<<sub<<endl;</pre>
                }
                else if(operation=='m'){
                        mult=num1*num2;
                        cout<<"multiplication is equal to "<<mult<<endl;</pre>
                }
                else if(operation=='d'){
                        div=num1/num2;
                        cout<<"division is equal to "<<div<<endl;
                }
```

```
cout<<"enter y to perform the task again and n for terminating the task "<<endl;
cin>>decision;
}
while (decision=='y');
```

}

```
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enter any two numbers you want to perform calculations with 2
enter
a for addition
s for subtraction
m for multiplication
d for division
multiplication is equal to 8
enter y to perform the task again and n for terminating the task
enter any two numbers you want to perform calculations with 8
enter
a for addition
s for subtraction
m for multiplication
d for division
sum is equal to 17
enter y to perform the task again and n for terminating the task
```

Lab Task 03

```
using namespace std; int
main()
{
    int even = 0; int number= 2; do{
    even+= number; number+=2;
}
    while(number<=100); cout<<"sum = "<<even;
}</pre>
```

```
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sum = 2550
------

Process exited after 0.2171 seconds with return value 0

Press any key to continue . . .
```

Lab task 04

```
using namespace std; int
main()
```

```
{
  int i, sum=0;
  i = 1;
  do{
      sum=sum + (i*i);
      i++;
      }
  while(i<=100);
cout<<"sum is eqaul to "<<sum<<endl;
    }
}</pre>
```

Lab task 05

#include <cmath> using
namespace std;

```
int main ()
{
    int result;
double x(2),i(0);

    do {

        double result= pow(x,i);
            cout<<result<<endl;
            i++;

        }while(i<=20);
return 0;
}</pre>
```

```
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                           + ~
1
2
4
8
16
32
64
128
256
512
1024
2048
4096
8192
16384
32768
65536
131072
262144
524288
1.04858e+006
Process exited after 0.1913 seconds with return value 0
Press any key to continue . . .
```

Lab Task 06

```
#include <iostream> using
namespace std;
int main ()
{
int num1,num2,sum = 0; cout<<"enter</pre>
any two numbers"<<endl;
cin>>num1>>num2;
  do{
if (num1%2 != 0){
sum += num1;
}
num1 ++;
}while(num1<=num2);</pre>
cout<<sum;
}
   © C:\Users\TALHA SANGRASI\D ×
  enter any two numbers
  10
  25
  Process exited after 6.769 seconds with return value 0
  Press any key to continue . . .
```

lab Manual 05 Home Tasks

```
# include <iostream>;
using namespace std;
int main()
{
int a,b,c;
cout<< "Enter first no. : ";</pre>
cin>>a;
cout<< "Enter sec no. : ";</pre>
cin>>b;
c=a*b;
while(a!=b)
{
  if(a>b)
  a=a-b;
else
  b=b-a;
}
cout<< "HCF = " << a<<endl;
cout<< "LCM = " << c/a<<endl;
return 0;
}
```

```
Enter first no. : 6
Enter sec no. : 9
HCF = 3
LCM = 18

Process exited after 11.47 seconds with return value 0
Press any key to continue . . .
```

```
#include
<iostream>
using
namespace
std;
int main()
{
       int num1,d,s(0),n,t; cout<<"enter first number of
the arithmetic progression "<<endl;
       cin>>num1;
       cout<<"enter common difference of the arithmetic progression "<<endl;</pre>
       cin>>d;
       cout<<"enter the numbers of terms of the arithmetic progression you want to add
"<<endl;
       cin>>n;
       for(t=1;t<=n;t++){
s+=num1;
num1+=d;
}
```

```
#include
<iostream>
using
namespace
std; int
main()
{ int x,r1,r2,c,u,l,s1,s2,o;
       cout<<"enter the number of rows for the diamond (number should be
odd)"; cin>>x;
       // for upper
rows u=(x+1)/2;
       for (r1=1;r1<=u;r1++){
for(s1=1;s1<=u-r1;s1++){
                       cout<<" ";
               }
               for(o=1; o<=r1*2-1;o++){
```

```
cout<<"+";
               }
                cout<<endl;
        }
        //for lower rows
        l=x-u;
        for(r2=l;r2>=1;r2--){
for(s2=1;s2<=u-r2;s2++){
               cout<<" ";
               }
                for(o=r2*2-1;o>=1;o--
                        cout<<"+";
){
               }
                cout<<endl;
        }
}
```

```
#include
<iostream>
using
namespace
std; int
main()
{
        int d,b(0),i(1),r;
        cout<<"enter a decimal number "<<endl;</pre>
        cin>>d;
        while(d
!=0)
        {
b=b+(d%2
)*i;
d=d/2;
i=i*10;
        } cout<<b;</pre>
}
```