## Cover

Student name

Group

ID

Lab 1: .....

Anything else, you can design your own cover

## Lab1-Ex1 description

```
#include<iostream>
 2
      #include<cmath>
 3
      using namespace std;
 4
 5
      int main()
 6
    □ {
7
          float a;
8
          float b;
9
          float c;
10
          float delta;
11
          float x1;
12
          float x2;
13
           cout<<"Enter a: "; cin>>a;
14
           cout<<"Enter b: "; cin>>b;
15
16
           cout<<"Enter c: "; cin>>c;
          cout<<"Enter a b c: "; cin>>a>>b>>c;
17
18
19
          delta = b * b - 4 * a * c;
20
          if(delta == 0)
21
22
              x1 = x2 = -b / 2 * a;
23
              cout<<"Answer has only one: "<<x1;</pre>
24
25
          else if(delta > 0)
26
27
              x1 = -b - sqrt(delta)/(2 * a);
28
              x2 = -b + sqrt(delta)/(2 * a);
29
              cout << "The equation has 2 roots: \n";
30
              cout<<"\tX1="<<x1;
31
              cout<<"\tX2="<<x2;
32
          }
33
          else
34
35
              cout<<"No answer";</pre>
36
37
          return 0;
```

```
■ D:\AdvacnedAlgorithm2024CADT\W1\W1-G1-test.exe

Enter a b c: 4 4 1

Answer has only one: -8

Process returned 0 (0x0) execution time : 1.898 s

Press any key to continue.

■
```

```
#include<iostream>
 1
 2
      using namespace std;
 3
 4
     void calculate(int x) {
 5
          float sum=0;
 6
 7
          for(int k=1; k<=x; k++){
 8
                 sum = sum + 1.0/k;
               sum = sum + (float) 1/k; //type casting
 9
               cout<<"1/"<<k<<" + ";
10
11
12
          cout<<"\b\b";
          cout<<" = ";
13
14
          cout<<sum;
15
16
17
    -main(){
          calculate(20);
18
19
```

```
■ D:\AdvacnedAlgorithm2024CADT\W1\W1-G1-Ex-.exe - \times 1/1 + 1/2 + 1/3 + 1/4 + 1/5 + 1/6 + 1/7 + 1/^{\circ}8 + 1/9 + 1/10 + 1/11 + 1/12 + 1/13 + 1/14 + 1/15 + 1/16 + 1/17 + 1/18 + 1/19 + 1/20 = 3.59774 Process returned 0 (0x0) execution time : 0.043 s Press any key to continue.
```