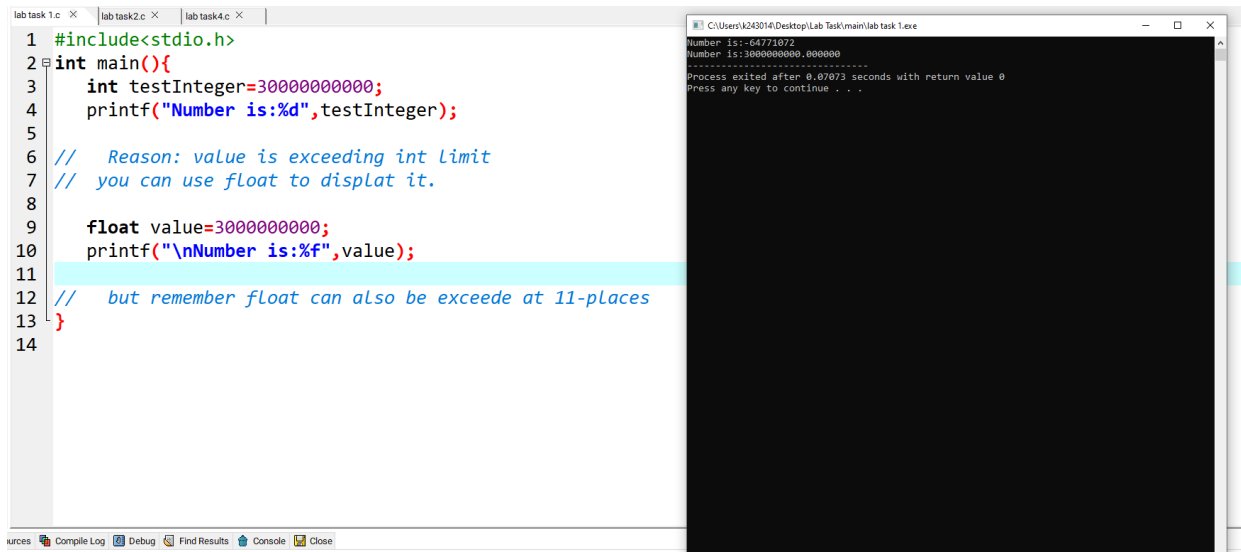


Lab Submission # 3:

Question # 1:



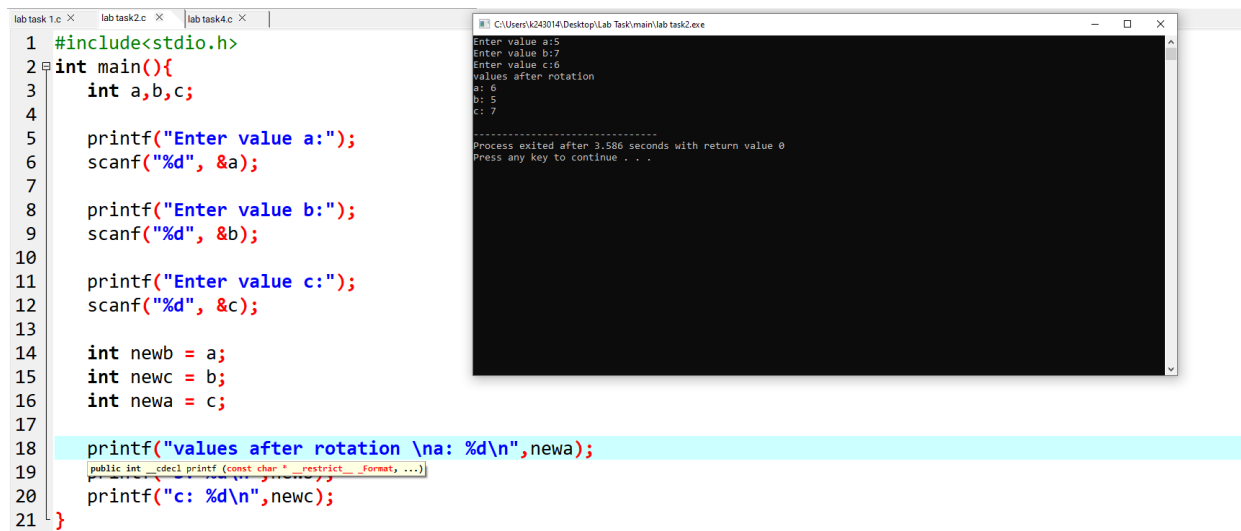
The screenshot shows a C++ IDE with two windows. The left window displays the source code for 'lab task1.c', and the right window shows the program's execution output.

```
1 #include<stdio.h>
2 int main(){
3     int testInteger=3000000000;
4     printf("Number is:%d",testInteger);
5
6     // Reason: value is exceeding int Limit
7     // you can use float to displat it.
8
9     float value=3000000000;
10    printf("\nNumber is:%f",value);
11
12    // but remember float can also be excede at 11-places
13 }
14
```

The output window shows the following text:

```
Number is:-64771872
Number is:3000000000.000000
Process exited after 0.07073 seconds with return value 0
Press any key to continue . . .
```

Question # 2:



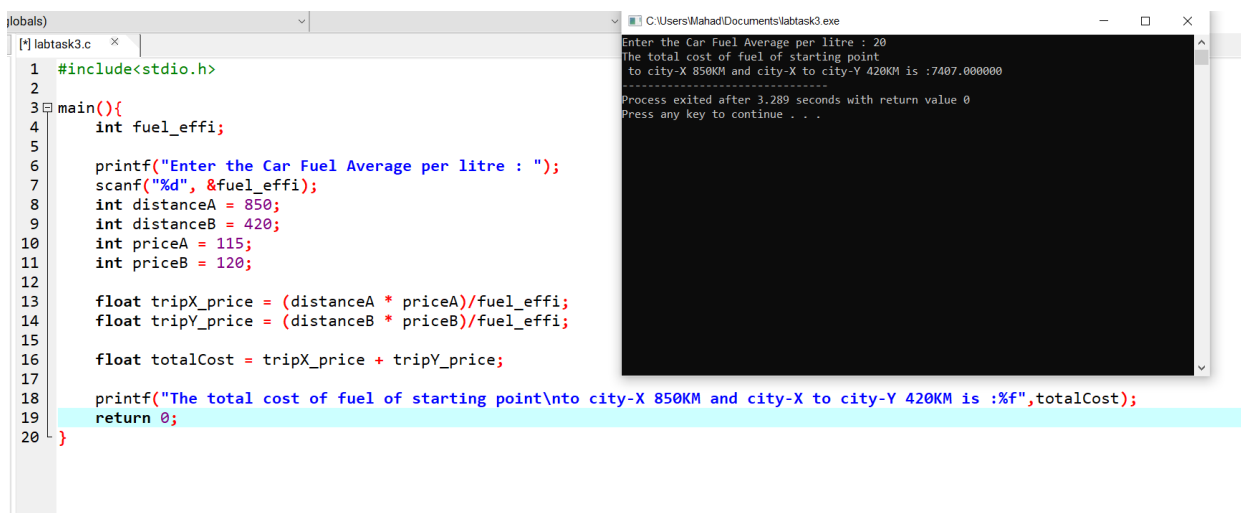
The screenshot shows a C++ IDE with two windows. The left window displays the source code for 'lab task2.c', and the right window shows the program's execution output.

```
1 #include<stdio.h>
2 int main(){
3     int a,b,c;
4
5     printf("Enter value a:");
6     scanf("%d", &a);
7
8     printf("Enter value b:");
9     scanf("%d", &b);
10
11    printf("Enter value c:");
12    scanf("%d", &c);
13
14    int newb = a;
15    int newc = b;
16    int newa = c;
17
18    printf("values after rotation \na: %d\n",newa);
19    printf("b: %d\n",newb);
20    printf("c: %d\n",newc);
21 }
```

The output window shows the following text:

```
Enter value a:5
Enter value b:7
Enter value c:6
values after rotation
a: 6
b: 5
c: 7
Process exited after 3.586 seconds with return value 0
Press any key to continue . . .
```

Question # 3



The screenshot shows a C++ IDE with two windows. The left window displays the source code for 'labtask3.c', and the right window shows the program's execution output.

```
1 #include<stdio.h>
2
3 main(){
4     int fuel_effi;
5
6     printf("Enter the Car Fuel Average per litre : ");
7     scanf("%d", &fuel_effi);
8     int distanceA = 850;
9     int distanceB = 420;
10    int priceA = 115;
11    int priceB = 120;
12
13    float tripX_price = (distanceA * priceA)/fuel_effi;
14    float tripY_price = (distanceB * priceB)/fuel_effi;
15
16    float totalCost = tripX_price + tripY_price;
17
18    printf("The total cost of fuel of starting point\nto city-X 850KM and city-X to city-Y 420KM is :%f",totalCost);
19    return 0;
20 }
```

The output window shows the following text:

```
Enter the Car Fuel Average per litre : 20
The total cost of fuel of starting point
to city-X 850KM and city-X to city-Y 420KM is :7407.000000
Process exited after 3.289 seconds with return value 0
Press any key to continue . . .
```

Question # 4:

```
lab task 1.c × lab task 2.c × lab task 4.c ×
1 #include<stdio.h>
2
3 int main(){
4     int xa,xb,ya,yb,chngey,chngey;
5     float slope;
6     printf("Enter x1 value :");
7     scanf("%d",&xa);
8     printf("Enter x2 value :");
9     scanf("%d",&xb);
10    printf("Enter y1 value :");
11    scanf("%d",&ya);
12    printf("Enter y2 value :");
13    scanf("%d",&yb);
14
15    chngey = yb-ya;
16    chngey = xb-xa;
17    slope = chngey/chngey;
18    // float slope = (y2-y1)/(x2-x1);
19    printf("slope is: %f",slope);
20 }
```

```
C:\Users\k342014\Desktop\Lab Task\main\lab task4.exe
Enter x1 value :2
Enter x2 value :4
Enter y1 value :8
Enter y2 value :6
slope is: -1.000000
-----
Process exited after 3.894 seconds with return value 0
Press any key to continue . . .
```

Question # 5:

```
[*] labtask3.c × labtask5.c ×
1 #include<stdio.h>
2
3 main(){
4     int principal;
5     float rate;
6     printf("please Enter the Principle/Deposit: ");
7     scanf("%d", &principal);
8     printf("please Enter annual rate(Annual rate should be between 1-100) : ");
9     scanf("%f", &rate);
10
11    rate = rate/100;
12    int interest = principal*rate;
13    printf("This is annual interest : %d", interest);
14
15    int totalAmount = principal + interest;
16    printf("\nThis is the total amount over the year: %d", totalAmount);
17
18 }
```

```
C:\Users\Mahad\Documents\labtask5.exe
please Enter the Principle/Deposit: 20000
please Enter annual rate(Annual rate should be between 1-100) : 20
This is annual interest : 4000
This is the total amount over the year: 24000
-----
Process exited after 4.033 seconds with return value 0
Press any key to continue . . .
```

Alternate solution Q2:

```
[*] labtask3.c × labtask5.c × lb2.c ×
1 #include<stdio.h>
2 int main(){
3     int a,b,c;
4
5     printf("Enter value a:");
6     scanf("%d", &a);
7
8     printf("Enter value b:");
9     scanf("%d", &b);
10
11    printf("Enter value c:");
12    scanf("%d", &c);
13
14    int z = c;
15    c=b;
16    b=a;
17    a=z;
18
19
20    printf("values after rotation \na: %d\n",a);
21    printf("b: %d\n",b);
22    printf("c: %d\n",c);
23 }
24
25
26
27
```

```
C:\Users\Mahad\Documents\lb2.exe
Enter value a:1
Enter value b:2
Enter value c:3
values after rotation
a: 3
b: 1
c: 2
-----
Process exited after 2.921 seconds with return value 0
Press any key to continue . . .
```

