#Program 1

```c
C q_1.c > ⊘ main()
1    #include<stdio.h>
2  ∨ int main()
3    {
4        printf("Enter the values of num1 and num2\n");
5        int a,b;
6        scanf("%d%d",&a,&b);
7        printf("Initially num1 = %d and num2 = %d\n",a,b);
8        a=a+b;
9        b=a-b;
10       a=a-b;
11       printf("After swapping num1 = %d and num2 = %d",a,b);
12   return 0;
13   }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE

∨ TERMINAL

```
3 5
Initially num1 = 3 and num2 = 5
After swapping num1 = 5 and num2 = 3
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Documer
" && gcc q_1.c -o q_1 && "d:\Documents_D_Drive\NIT study\Programs\A
Enter the values of num1 and num2
5 6
Initially num1 = 5 and num2 = 6
After swapping num1 = 6 and num2 = 5
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```

#Program 2

- Subproblem a

```c
1    #include<stdio.h>
2    int main()
3    {
4        int a;
5        scanf("%d",&a);
6        if(a%2==0) printf("The given number:%d is even",a);
7        if(a%2!=0) printf("The given number:%d is odd",a);
8    return 0;
9    }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE

TERMINAL

```
Microsoft Windows [Version 10.0.19041.985]
(c) Microsoft Corporation. All rights reserved.

D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Docume
" && gcc q_2_a.c -o q_2_a && "d:\Documents_D_Drive\NIT study\Progr
8
The given number:8 is even
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Docume
" && gcc q_2_a.c -o q_2_a && "d:\Documents_D_Drive\NIT study\Progr
9
The given number:9 is odd
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```

- Subproblem b

```c
1    #include<stdio.h>
2    int main()
3    {
4        int a;
5        scanf("%d",&a);
6        if(a%2==0) printf("The given number:%d is even",a);
7        else printf("The given number:%d is odd",a);
8    return 0;
9    }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE

TERMINAL

```
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Doc
" && gcc q_2_b.c -o q_2_b && "d:\Documents_D_Drive\NIT study\Pr
7
The given number:7 is odd
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Doc
" && gcc q_2_b.c -o q_2_b && "d:\Documents_D_Drive\NIT study\Pr
9
The given number:9 is odd
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Doc
" && gcc q_2_b.c -o q_2_b && "d:\Documents_D_Drive\NIT study\Pr
98
The given number:98 is even
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```

#Program 3

- SubProblem a

```c
1    #include<stdio.h>
2    int main()
3    {
4        int a,b,c;
5        scanf("%d%d%d",&a,&b,&c);
6        int greatest;
7        if(a>b){
8            if(a>=c) greatest=a;
9            else greatest=c;
10       }
11       else{
12           if(b>=c) greatest=b;
13           else greatest=c;
14       }
15       printf("The greatest of %d,%d and %d is %d",a,b,c,greatest);
16       return 0;
17   }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE

TERMINAL

```
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Documents_D_D
" && gcc q_3_a.c -o q_3_a && "d:\Documents_D_Drive\NIT study\Programs\Ass
1 2 3
The greatest of 1,2 and 3 is 3
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```

- SubProblem b

```c
1    #include<stdio.h>
2    int main()
3    {
4        int a,b,c;
5        scanf("%d%d%d",&a,&b,&c);
6        int greatest;
7        if(a>=b && a>=c) greatest=a;
8        else if(b>=a && b>=c) greatest=b;
9        else greatest=c;
10       printf("The greatest on %d,%d and %d is %d",a,b,c,greatest);
11       return 0;
12   }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE

∨ TERMINAL

```
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Documents_D_Drive
" && gcc q_3_b.c -o q_3_b && "d:\Documents_D_Drive\NIT study\Programs\Assignm
1 2 3
The greatest on 1,2 and 3 is 3
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Documents_D_Drive
" && gcc q_3_b.c -o q_3_b && "d:\Documents_D_Drive\NIT study\Programs\Assignm
5 1 1
The greatest on 5,1 and 1 is 5
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```

#Program 4

```c
1    #include<stdio.h>
2    void main()
3    {
4        printf("Enter the numbers and operation that you want to perform\n");
5        int a,b,output,flag=0;
6        char c;
7        scanf("%d%c%d",&a,&c,&b);
8        if(c=='+') output=a+b;
9        else if(c=='-') output=a-b;
10       else if(c=='*') output=a*b;
11       else if(c=='/') output=a/b;
12       else {
13           printf("Invalid character\n");
14           flag=1;
15       }
16       if(flag==0) printf("%d %c %d = %d",a,c,b,output);
17       return;
18   }
```

PROBLEMS   OUTPUT   DEBUG CONSOLE

TERMINAL

```
Enter the numbers and operation that you want to perform
4+3
4 + 3 = 7
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```

```
4+3
4 + 3 = 7
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Docum
" && gcc q_4.c -o q_4 && "d:\Documents_D_Drive\NIT study\Programs
Enter the numbers and operation that you want to perform
3-2
3 - 2 = 1
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Docum
" && gcc q_4.c -o q_4 && "d:\Documents_D_Drive\NIT study\Programs
Enter the numbers and operation that you want to perform
4*5
4 * 5 = 20
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>cd "d:\Docum
" && gcc q_4.c -o q_4 && "d:\Documents_D_Drive\NIT study\Programs
Enter the numbers and operation that you want to perform
50/2
50 / 2 = 25
D:\Documents_D_Drive\NIT study\Programs\Assignment_2>
```