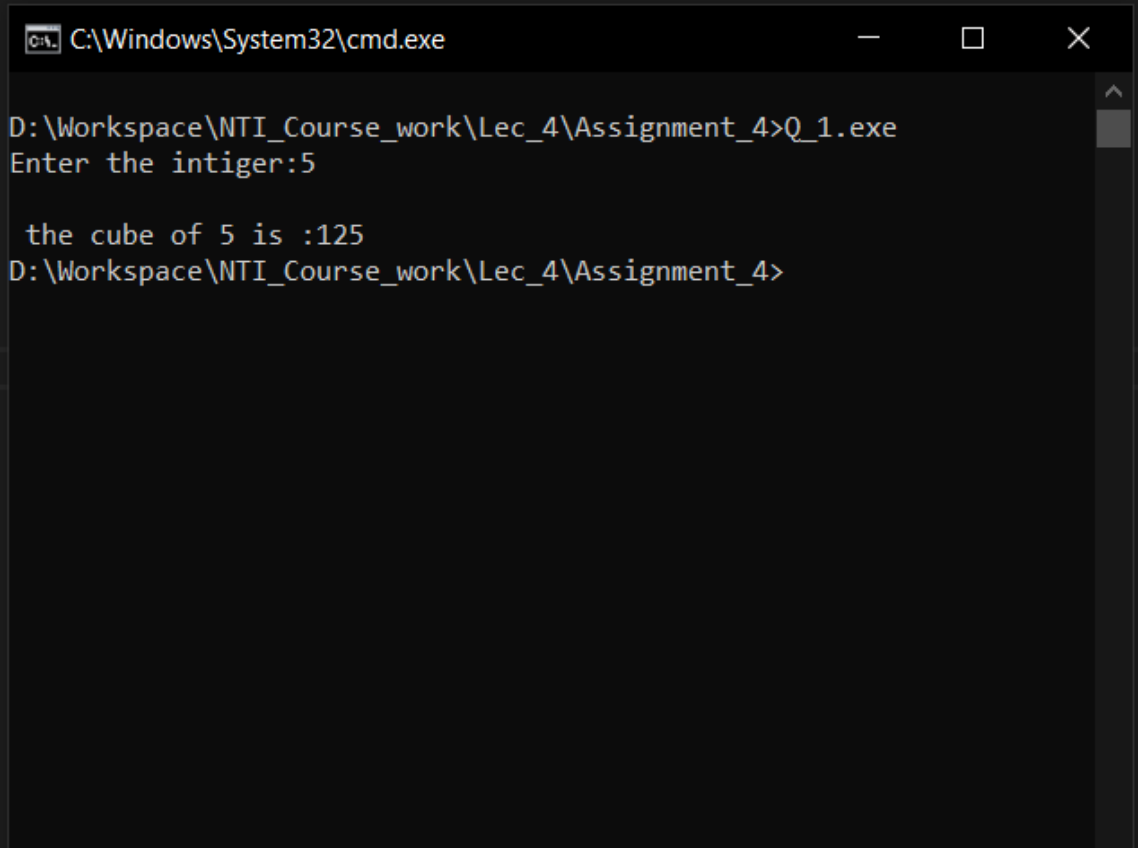
```c
#include<stdio.h>

int cube(int x){
    return(x*x*x);
}
int main()
{   int x, r;
    printf("Enter the intiger:");
    scanf("%d",&x);
    r=x*x*x;
    printf("\n the cube of %d is :%d",x,r);
}

```



```c
#include<stdio.h>
int calc(int a,int b, char op){
    int result;
switch(op)
    {
        case '+':
            result = a + b;
            break;
        case '-':
            result = a - b;
            break;
        case '*':
            result = a * b;
            break;
        case '/':
            result = a / b;
            break;
    }
    return (result);
    }

int main ()
{   int x,y,r;
    char o;
    printf("Enter the equation:");
    scanf("%d%c%d",&x,&o,&y);
    r=calc(x,y,o);
    printf("The result is:%d",r);
}
```

```
C:\Windows\System32\cmd.exe

D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_2.exe
Enter the equation:3/1
The result is:3
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_2.exe
Enter the equation:3*7
The result is:21
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>
```

NTI_Course_work > Lec_4 > Assignment_4 > C Q_3.c > ...

```c
#include <stdio.h>
int checkPrimeNumber(int n) {// user-defined function to check prime numb
    int j, flag = 1;
    for (j = 2; j <= n / 2; ++j) {
        if (n % j == 0) {
            flag = 0;
            break;
        }
    }
    return flag;
}
int main() {
    int n1, n2, i, flag;
    printf("Enter two positive integers: ");
    scanf("%d %d", &n1, &n2);
    printf("Prime numbers between %d and %d are: ", n1, n2);
    for (i = n1 + 1; i < n2; ++i) {

        // flag will be equal to 1 if i is prime
        flag = checkPrimeNumber(i);

        if (flag == 1)
            printf("%d ", i);
    }
    return 0;
}

```

C:\Windows\System32\cmd.exe

```
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_3.exe
Enter two positive integers: 2 50
Prime numbers between 2 and 50 are: 3 5 7 11 13 17 19 23 29 31 37 41 43 47
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>
```

Q_4.1.c

NTI_Course_work > Lec_4 > Assignment_4 > Q_4.1.c > main()

```c
#include<stdio.h>
int T_Holes(int n);
int HoleInNo( int n);
int T_Holes(int n);
int main()
{   int n,r;
    printf("Enter a positive intiger");
    scanf("%d",&n);
    r= T_Holes(n);
    printf("the total # of holes is%d",r);


}
int T_Holes(int n)
{   int temp,count=0;
    while (n!=0)
    {   temp=n%10;
     if (temp == 8)
    count += 2;
    else if (temp== 0 || temp== 4 || temp== 6 || temp == 9)
     count++;
        n=n/10;
    }

    return(count);

}

```

C:\Windows\System32\cmd.exe

```
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_4.exe
Enter a positive intiger2569
the total # of holes is2
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_4.exe
Enter a positive intiger5583
the total # of holes is2
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_4.exe
Enter a positive intiger88888
the total # of holes is10
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>
```

NTI_Course_work > Lec_4 > Assignment_4 > C Q_5.c > ...

```c
#include<stdio.h>
#include<math.h>

int CheckNumber( int n)
{
    int r;
    int s= sqrt(n);
    int c = sqrt(n);
    if (n %s==0)
       r=1;
    else if(n% c== 0)
        r=0;
    else
        r=-1;
    return("%d",r);
}


int main()
{   int n,r;
    printf("Enter a positive intiger");
    scanf("%d",&n);
    r= CheckNumber(n);
    if (r==1)
        printf("the number is of power of 2");
    else if (r==0)
        printf("the number is of power of 3");
    else
        printf("the number is neither of power of 2 nor power of 3");

}
```

C:\Windows\System32\cmd.exe

```
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_5.exe
Enter a positive intiger8
the number is of power of 2
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_5.exe
Enter a positive intiger25
the number is of power of 2
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_5.exe
Enter a positive intiger27
the number is neither of power of 2 nor power of 3
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_5.exe
Enter a positive intiger125
the number is neither of power of 2 nor power of 3
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>
```

NTI_Course_work > Lec_4 > Assignment_4 > C Q_6.c > main()

```c
// C/C++ program for decimal to binary
// conversion using recursion
#include <stdio.h>

// Decimal to binary conversion
// using recursion
int find(int n)
{
    if (n == 0)
        return 0;
    else
        return (n % 2 + 10 *find(n / 2));
}

// Driver code
int main()
{   int n,r;
    printf("Enter a positive intiger");
    scanf("%d",&n);
    printf("\n the binary representation is: %d\n", find(n));
    return 0;
}
```

```
D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>gcc Q_6.c -o Q_6.exe

D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_6.exe
Enter a positive intiger25

 the binary representation is: 11001

D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>Q_6.exe
Enter a positive intiger123

 the binary representation is: 1111011

D:\Workspace\NTI_Course_work\Lec_4\Assignment_4>
```