***DAY 7***

***ASSIGNMENT***

***Question 1 :***

***Write a program implementing insert, delete and display operation of Circular Queue.***

***ANSWER:***

***1.***

#include<stdio.h>

int q[50], f = -1, r = -1, size;

void enqueue(int x);

void dequeue();

void display();

int main()

{

printf("Enter the queue size: ");

scanf("%d", &size);

enqueue(10);

enqueue(20);

enqueue(30);

enqueue(40);

enqueue(50);

display();

enqueue(60);

dequeue();

display();

return 0;

}

void enqueue(int x)

{

if((r+1)%size = f)

{

printf("Overflow\n");

return;

}

if(r == -1 && f==-1)

{

f = r = 0;

}

else if(r=size-1 && f!=1)

{

r=0;

}

else

{

r=(r+1)%size

}

q[r]=x;

}

void dequeue()

{

int x;

if(f == -1)

{

printf("Underflow\n");

return;

}

x = q[f];

if(f == r)

{

f = r = -1;

}

else if(f=size-1)

{

f=0;

}

f++;

printf("Deleted item: %d\n", x);

}

void display()

{

int i=f;

if(f == -1 && r==-1)

{

printf("No item to display\n");

return;

}

printf("\nElements in a Queue are :");

**while**(i<=rear)

        {

            printf("%d,", q[i]);

            i=(i+1)%max;

        }

    }

}

for(i = f; i <= r; i++)

printf("|%d|", q[i]);

printf("\n");