3.a Program to simulate the working of queue of integers using array.

#include<stdio.h>

#define max 50

int qarr[max];

int r = -1;

int f = -1;

display()

{

int i;

if(f == -1)

printf("Queue is empty \n");

else

{

printf("Queue is : \n");

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

printf("%d",qarr[i]);

printf("\n");}

}

}

main()

{

int ch;

printf("DISHA D S, 1BM23CS094\n");

while(1)

{

printf("1.INSERT\n");

printf("2.DELETE\n");

printf("3.DISPLAY\n");

printf("4.EXIT\n");

printf("Enter your choice: ");

scanf("%d",&ch);

switch(ch)

{

case 1: insert(); break;

case 2: deleting(); break;

case 3: display(); break;

case 4: exit(10);

default: printf("INVALID CHOICE \n");

}

}

}

insert()

{

int add;

if(r == max-1)

printf("QUEUE OVERFLOW \n");

else

{

if( f == -1)

f=0;

printf("Insert the element in queue: ");

scanf("%d",&add);

r = r+1;

qarr[r] = add;

}

}

deleting()

{

if(f == -1 || f>r)

{

printf("QUEUE UNDERFLOW \n");

return;

}

else

{

printf("Deleted element is: %d\n", qarr[f]);

f++;

}

}



