#include <stdio.h>

void insert();

void delete();

void display();

void peek();

int queue\_array[100],rear = - 1,front = - 1,n;

int main()

{

printf("\n Enter the size:");

scanf("%d",&n);

int choice;

do

{

printf("1.Insert element to queue \n");

printf("2.Delete element from queue \n");

printf("3.Display all elements of queue \n");

printf("4.peek element is \n");

printf("5.Quit \n");

printf("Enter your choice : ");

scanf("%d", &choice);

switch (choice)

{

case 1:

insert();

break;

case 2:

delete();

break;

case 3:

display();

break;

case 4:

peek();

break;

case 5:

printf("Exit\n");

break;

default:

printf("Wrong choice \n");

}

}

while(choice!=5);

return 0;

}

void insert()

{

int item;

if (rear == n - 1)

printf("Queue Overflow \n");

else

{

if (front == - 1)

front = 0;

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

scanf("%d", &item);

rear = rear + 1;

queue\_array[rear] = item;

}

}

void delete()

{

if (front == - 1 || front > rear)

{

printf("Queue Underflow \n");

return ;

}

else

{

printf("Element deleted from queue is : %d\n", queue\_array[front]);

front = front + 1;

}

}

void display()

{

int i;

if (front == - 1)

printf("Queue is empty \n");

else

{

printf("Queue is : \n");

for (i = front; i <= rear; i++)

printf("%d ", queue\_array[i]);

printf("\n");

}

}

void peek()

{

if(front==-1 || front>rear)

printf("No element\n");

else

printf("Peek element is %d\n",queue\_array[front]);

}



