**Program**

**#include <stdio.h>**

**#define MAX 10**

**int queue[MAX],rear=-1,front=-1;**

**int insert();**

**int delete();**

**int display();**

**int main(void) {**

**int ch;**

**do**

**{**

**printf("\n \*\*\*\*\*MAIN MENU\*\*\*\*\*");**

**printf("\n 1. INSERT");**

**printf("\n 2. DELETE");**

**printf("\n 3. DISPLAY");**

**printf("\n 4. EXIT");**

**printf("\n Enter your option: ");**

**scanf("%d", &ch);**

**switch(ch)**

**{**

**case 1:**

**insert();**

**break;**

**case 2:delete();**

**break;**

**case 3:display();**

**break;**

**}**

**}while(ch!=4);**

**return 0;**

**}**

**int insert()**

**{**

**int item;**

**if(rear==MAX-1)**

**{**

**printf("OVERFLOW");**

**}**

**else**

**{**

**printf("Enter the element to insert:");**

**scanf("%d",&item);**

**if(front==-1 && rear==-1)**

**{**

**front=0;**

**rear=0;**

**}**

**else**

**{**

**rear=rear+1;**

**}**

**queue[rear]=item;**

**}**

**return 0;**

**}**

**int delete()**

**{**

**int val;**

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

**printf("UNDERFLOW");**

**else**

**{**

**val=queue[front];**

**front=front+1;**

**printf("deleted element is %d",val);**

**}**

**return 0;**

**}**

**int display()**

**{**

**int i;**

**if(front==-1 && rear==-1)**

**printf("queue IS EMPTY");**

**else**

**{**

**printf("\*\*\*QUEUE\*\*\*\n ");**

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

**{**

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

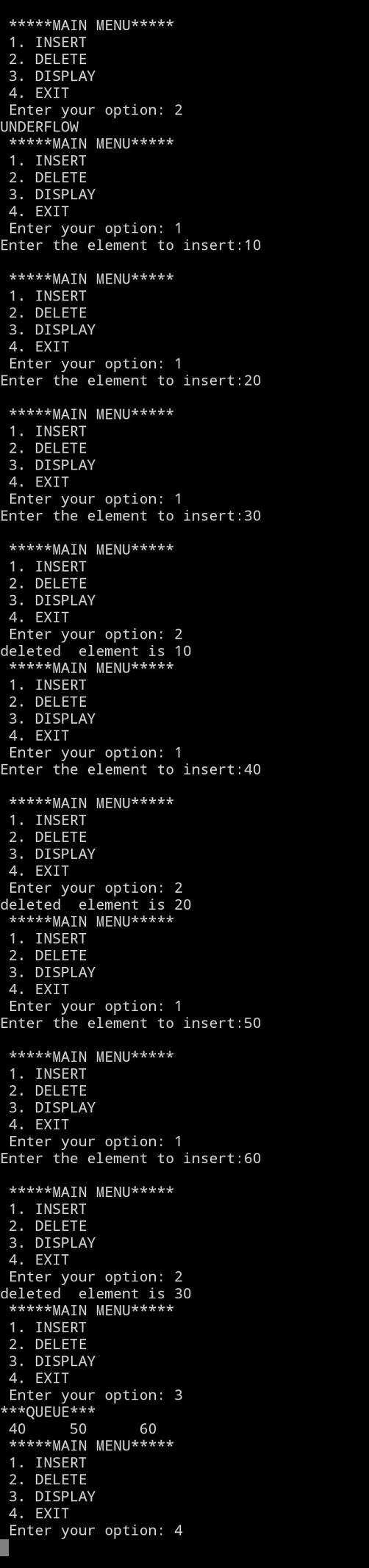
**}**

**}**

**return 0;**

**}**

**Output**

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