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#include<stdio.h>
#include<stdlib.h>
#define maxsize 5
void insert();
void delete();
void display();
int front = -1, rear = -1;
int queue[maxsize];
void main ()
{
    int choice;
    while(choice != 4)
    {
        printf("\n*****Main Menu*****\n");
        printf("\n=====
=====\\n");
        printf("\n1.insert an element\n2.Delete an element\n3.Display the queue\n4.Exit\\
n");
        printf("\nEnter your choice ?");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1:
                insert();
                break;
            case 2:
                delete();
                break;
            case 3:
                display();
                break;
            case 4:
                exit(0);
                break;
            default:
                printf("\nEnter valid choice??\n");
        }
    }
}

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    }
}
void insert()
{
    int item;
    printf("\nEnter the element\n");
    scanf("\n%d",&item);
    if(rear == maxsize-1)
    {
        printf("\nOVERFLOW\n");
        return;
    }
    if(front == -1 && rear == -1)
    {
        front = 0;
        rear = 0;
    }
    else
    {
        rear = rear+1;
    }
    queue[rear] = item;
    printf("\nValue inserted ");

}
void delete()
{
    int item;
    if (front == -1 || front > rear)
    {
        printf("\nUNDERFLOW\n");
        return;
    }
    else
    {
        item = queue[front];

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front = front + 1;
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printf("\nvalue deleted ");  
}
```

```
}
```

```
void display()
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```
{  
    int i;  
    if(rear == -1)  
    {  
        printf("\nEmpty queue\n");  
    }  
    else  
    { printf("\nprinting values ..... \n");  
      for(i=front;i<=rear;i++)  
      {  
          printf("\n%d\n",queue[i]);  
      }  
    }  
}
```