```
#include <stdio.h>
#include <stdlib.h>
#include <limits.h>
#define quesize 10

int item, p,  rear=-1, q[quesize][2];

void insrear(){
   if(rear<quesize){
   q[++rear][0]=item;
   q[rear][1]=p;
   }
   else
   printf("Queue overflow\n");
}

void remove_small(){
   int min=INT_MAX;
   int t;
   for(int i=0;i<=rear;i++){
      if(q[i][1]<min){
      min=q[i][1];
      t=i;
      }
   }
   if(min!=INT_MAX){
   printf("Element removed: %d & priority number:%d\n",q[t][0],min);
   q[t][1]=INT_MAX;
   }
   else
   printf("Queue Underflow\n");
```

```
}

void display(){
   printf("Elements of queue:\nele\tpriority\n");
   for(int i=0;i<=rear;i++){
      if(q[i][1]!=INT_MAX)
      printf("%d\t%d\n",q[i][0],q[i][1]);
   }
}
int main(){
   int choice;
   for(;;){
      printf("Enter:\n1. Insert Element\n2. Delete Highest Prior\n3. Display\n4. Exit\n");
      scanf("%d",&choice);
      switch (choice){
         case 1: printf("Enter element and priority:\n");
         scanf("%d%d", &item,&p);
         insrear();
         break;
         case 2: remove_small();
         break;
         case 3: display();
         break;
         case 4: exit(0);
         default: printf("Wrong choice\n");
      }
   }
   return 0;
}
```

```
1
Enter element and priority:
15


2
Enter:
1. Insert Element
2. Delete Highest Prior
3. Display
4. Exit
3
Elements of queue:
ele     priority
12      3
14      1
15      2
Enter:
1. Insert Element
2. Delete Highest Prior
3. Display
4. Exit
2
Element removed: 14 & priority number:1
Enter:
1. Insert Element
2. Delete Highest Prior
3. Display
4. Exit
```