Priority Queue

```
#include<stdio.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 no.=%d\n", q[t][0],min);

    q[t][1] = INT_MAX.

}

else
```

```
printf("Queue Overflow\n");
}
void display(){
printf("Enter Elements of queue:\nele\t priority\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-Prio
\n3. Display\n4 Exit\n");
scanf("%d" &choice);
switch(choice){
case 1: printf("Enter element & priority:\n");
scanf("%d %d",&item,&p);
insrear();
break;
case 2: removemin_small();
break;
case 3: display();
break;
case 4: exit(0)
break;
```

Signature.....

```
        default : printf("wrong choice\n");
    }
}
return 0;
}
```