```
#include <stdio.h>
#include <conio.h>
#define N 3
int queue[3][N];
int front[3] = {0,0,0};
int rear[3] = {-1,-1,-1};
int item, pr;
void main(){
 int ch;
 while(1){
  printf("-----Priority Queue-----");
  printf("\n1:PQinsert\n2:PQdelete\n3:PQdisplay\n4:exit\n");
  printf("enter choice");
  scanf("%d",&ch);
  switch(ch){
  case 1: printf("enter priority no\n");
        scanf("%d",&pr);
        if(pr>0 && pr<4)
          pqinsert(pr-1);
        else printf("only 3 priority exists 1,2,3\n");
        break;
  case 2: pqdelete; break;
  case 3: display; break;
  case 4: exit(0);
  }
 }
}
pqinsert(int pr){
  if(rear[pr]==N-1){
    printf("queue overflow\n");
  else{
    printf("enter item\n");
    scanf("%d",&item);
```

```
        rear[px]++;
        queue[px][rear[px]] = item;
    }
    return;
}
pq_delete(){
    int q;
    for(q=0; q<3; q++){
        if(rear[q] == front[q]-1)
            printf("queue empty\n");
        else{
            printf("deleted item %d from queue %d\n",
                queue[q][front[q]], q+1);
            front[q]++;
            return;
        }
    }
}
display(){
    int q, i;
    for(q=0; q<3; q++){
        if(rear[q] == front[q]-1)
            printf("queue empty %d\n", q+1);
        else{
            printf("\n queue %d: \n", q+1);
            for(i=front[q]; i<=rear[q]; i++)
                printf("%d\t", queue[q][i]);
        }
    }
    return;
}
```