```
Multiple Priority
                        and set relief ( Enles the Lone
                          Econf (what 3 wass)
# include < stdio. h?
# define N 3
                                  () Loss tosses
int queve [3] [N],
                                ease is item - deletefront
int front [3] = {0,0,03;
int rear [3] = {-1, -1, -13;
int item, pr;
void main ()
                                   Es duployally
  while (1)
    prints ("PRIDRITY QUEUE \n");
    printf (" *** * * (n");
   print ("In (t1. Poinsert In");
    print ("In 12: PQ delete (n");
    print ("In \t3: PQ-display \n");
    print ("\n (t4: Exit \n");
    printly ("In enter the choice n");
    Scanf (" olod", & ch);
    switch (ch)
      case 1: printf ("In enter the priority number In");
scarf ("40d", & pr);
scard "f (pr 70 && pr<4)
pqinsert (pr-1);
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printf ("In only 3 periority exists 1 23 \n");
case d: pg delete ();
break;
case 3: display ();
        break;
 uare 4° exit (0);
 pginsert (int pr)
 2 if(rear[pr] == N-1)
     prints ("I'm Queue overflowen");
     Frist ("In enter the "tem (n");
scarf ("%d", & item);
        rear [pr]++;
       quentpr][rear[pr]] = iten;
     return;
  pgdelete ()
     int i;
     for( 2=0; 223; 2++)
      if ( rear [e] = = front [i]-1)
         printf ("\ queue empty(n");
          print ("deleted item is 10d of greene 10d m, greene [1)
    front[i]++;
return;
3
                                              [front[e]], i+1);
```

display () for (i=0; 123; i++) if (rear [e] = front [e]-1)

printf (" \ n queue empty % d\n", i+1);

lie printf("InQUEUE ".di", i+1); for (j= front[i];j2= rear[i];j++> print ("%d\t", queue [=][]); return; Ascending Priority Julie. # include 2stdio.h> # include < etdlib.h> # define MAX 3 int pg[MAX]; int count = 0; int d=0; roid input (int data) ? int i=0; if (count = = MAX) 2 printf ("Queue overflow \n"); return; if (count == 0) { pg [court ++] = data; else 2 for (i = count - 1; i>= 0; i--) { 4(data< pg[i]) {

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pg [ i+ ] = pg [ e];
else {
busk;
}
 pg[i+1] = data;

count ++;
int removeData () 3
  neturn pg [d+];
 wid display ()
 int i;

if (count ==0)
    prints ("queue is empty\n");
retuen;
  print ("Contents of queue" "),
for ( i=d; i < count; i++)
   { printf (" olod", pg [i]);
   printf (" \n");
 int main () {
     ent choice, item;
      for (;;)
      2 printf ("In 1: insert In 2: delete - smallest In 3: display
          printy (" Enter the choice.");
          scarfl"/od", 8 choia);
          switch (choice)
```

case 1: print l'Enter the item to be on scarf (" 4.d", & item); insert (item); case 2: iten = removeData (); 4 (item == -1) print ("Quece is empty)n"); print ("item deleted =: %d\n", liten); break; case 3: display (); default : exit (0); Descending Priority Queue # include / stdio .h> create ("Contents of queues # include < stdlib.h > # define MAX 3 int pg[max]; int count = 0; " (" of ") flow int d=0; roid insert (int data) ? int i=0;if (count == MAX) if / count = "
2 printf ("Queue overflow \n"); return; if (court ==0) { 3 else 2

```
for ( = count -1; 2>=0; 2--) {
     if (data >pg[r]) {
       Py [i+D= pg [e];
      I else &
      break;
     Pg[i+1]=data;
     count ++;
int removeData() {
 return pg[d++];
roid display ()
 a int e;
 if (court = = 0)
 2 printf ("queue is empty \n");
return;
prints ("Contents of queue: ");
 for ( i=d; i < count; i++)
   2 prints ("% d", pg[e]);
 3 printf ("\n");
int main () {
   int choice, item;
    for (;;)
   2 printy ("In1: insert In2: delete-largest In3: display In4:
                                                       exitln");
      printf ("Enter the choice : ");
       scarf ("'kd", & choice);
       suitch (choice)
```

case 1 : printf ("Enter the "ten to be inserted") scarf ("%d", 8"item); insert (item); break; case 2: item = remove Data(); if (item == -1) prints ("Queue is empty In"); printf ("item deleted= "od m", item); break; ecse 3: display (); break; default : exit (0); with a conjects of theres s.