Ascending Priority Queue :-

```
#include <stdio.h>
#include<stdlib.h>
#define SIZE 3
  int rear=-1, front=0, item;
  int count=0;
  int q[10];
  int ch;
void insert_rear()
{
  if(rear==SIZE-1)
  {
    Printf("Queue overflow\n");
    return;
  }
  rear=rear+1;
  q[rear]=item;
  count++;
}
void insertion_sort()
{
  int i,j,flag;
  for(i=1;i<count;i++)
  {
    flag=q[i];
    j=j-1;
```

```
while (j>=0 && q[j]>flag)
{
 q[j+1]=q[j];
 j=j-1;
}
q[j+1]=flag;
}
}

void Remove_small()
{
 if (front>rear)
 {
  front=0;
  rear=-1;
  Printf("Queue is empty\n");
  return;
 }
 Printf("Item deleted = %d\n", q[front++]);
}

void display()
{
 if (front>rear)
 {
  Printf("Queue is empty\n");
  return;
 }
 Printf("%d\n", q[i]);
}
```

```
int main()
{
  for(;;)
  {
  Printf("\n1:Insert_Rear\n2:Remove_Small
          \n3:Display\n4:Exit\n");
  Printf("Enter the choice:\n");
  scanf("%d", &ch);
  Switch(ch)
  {
    case 1: Printf("Enter the item:\n");
            Scanf("%d", &item);
            insert_rear();
            insertion_sort();
            break;
    case 2: Remove_Small();
            break;
    case 3: display();
            break;
    default: exit(0);
  }
}
  return 0;
}
```