

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#define qsize 5
```

```
int item, f=0, r=-1, q[10];
```

```
void insertrear(){
```

```
    if(r==qsize-1){
```

```
        printf("Queue overflow\n");
```

```
        return;
```

```
    }
```

```
    q[++r]=item;
```

```
}
```

```
int deletefront(){
```

```
    if(f>r){
```

```
        f=0;
```

```
        r=-1;
```

```
        return -1;
```

```
    }
```

```
    return q[f++];
```

```
}
```

```
void display(){
```

```
    if (f>r){
```

```

    printf("Queue is empty\n");

    return;
}

printf("\n");

for(int i=f;i<=r;i++){

    printf("%d\n",q[i]);

}

}

int main(){

    int choice;

    for(;;){

        printf("Enter:\n1. Insert Rear\n2. Delete Front\n3. Display\n4. Exit\n");

        scanf("%d",&choice);

        switch (choice){

            case 1: printf("Enter element:\n");

                scanf("%d", &item);

                insertrear();

                break;

            case 2: item=deletefront();

                if(item== -1)

                    printf("Queue empty\n");

                else

                    printf("Element deleted is:%d\n",item);

                break;

            case 3: display();

```

```
break;
```

```
case 4: exit(0);
```

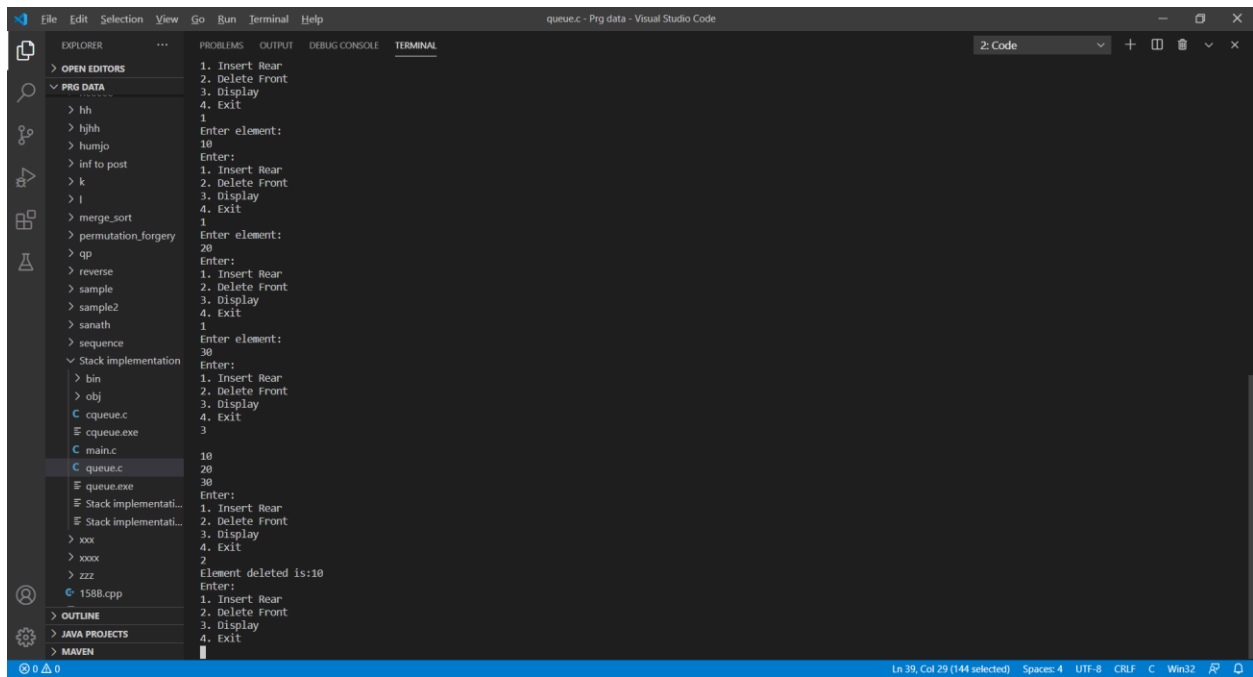
```
default: printf("Wrong choice\n");
```

```
}
```

```
}
```

```
return 0;
```

```
}
```



```
#include <stdio.h>
#include <conio.h>
#include <process.h>
#define QW SIZE 3
```

```
int item, front = 0, rear = -1, q[10];
```

```
void insertrear()
```

```
{
    if (rear == QW SIZE - 1)
    {
        printf("Overflow"); return;
    }
}
```

```
rear = rear + 1;  
q[rear] = item;  
}
```

```
int deleteFront()  
{  
if (front > rear)
```

```
{  
front = 0;  
rear = -1;  
return -1;  
}
```

```
return q[front++];  
}
```

```
void display  
void displayQ()
```

```
{  
int i;  
if (front > rear)
```

```
{  
printf("queue is empty \n");  
for (i = front; i <= rear; i++)
```

```
{  
printf("%d \n", q[i]);  
}
```

```
}
```

```
void main()  
{  
}
```



```

int choice;
do {
    clrscr();
    pr(i);
    printf("\n 1: insert rear\n 2: delete front\n 3: display\n 4: exit\n");
    scanf("%d", &choice);
    switch(choice)
    {
        case 1: printf("Enter item");
                scanf("%d", &item);
                insert_rear();
                break;
        case 2: item = delete_front();
                if (item == -1)
                    printf("Queue is empty\n");
                else
                    printf("Item deleted = %d\n", item);
                break;
        case 3: display();
                break;
        default: exit(0);
    }
}

```