

Lab Program

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

```
#define size 5
```

```
int f = 0, r = -1, value;
```

```
int q[size];
```

```
void insertRear() {
```

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

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

```
        return;
```

```
    }
```

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

```
}
```



```
void deleteFront() {
```

```
    if (f > a) {
```

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

```
        return;
```

```
    }
```

```
    printf("r.d\n" q[f++]);
```

```
    if (f > a) {
```

```
        f = 0;
```

```
        a = -1;
```

```
    }
```

```
}
```

```
void display() {
```

```
    if (f > a) {
```

```
        printf("null\n");
```

```
        return;
```

```
    }
```

```
    int i;
```

```
    for (i = f; i <= a; i++) {
```

```
        printf("r.d ", q[i]);
```

```
    }
```

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

```
}
```

```
int main() {
```

```
    int ch
```

```
    while (1) {
```

```
        printf("1 - delete insert rear\n 2 - delete front\n
```

```
        3 - display\n 4 - exit\n");
```

```
        scanf("%d", &ch);
```

```
        switch(ch) {
```

```
            case 1:
```

```
                printf("Enter\n");
```



```
scanf("%d", &value);  
insertrear();  
break;
```

```
case 2:  
deleterfront();  
break;
```

```
case 3:  
display();  
break;
```

```
default:  
return 0;
```

```
}
```

```
}
```