QUEUE ADT

ADT: is defined as type or class which is collection of values and operations.

Queue ADT:

Objects: a finite ordered list with zero or more elements

Functions:

Insert(): if queue is full return false

else

inserting a element into queue using rear end.

Delete(): if queue is empty return false

else

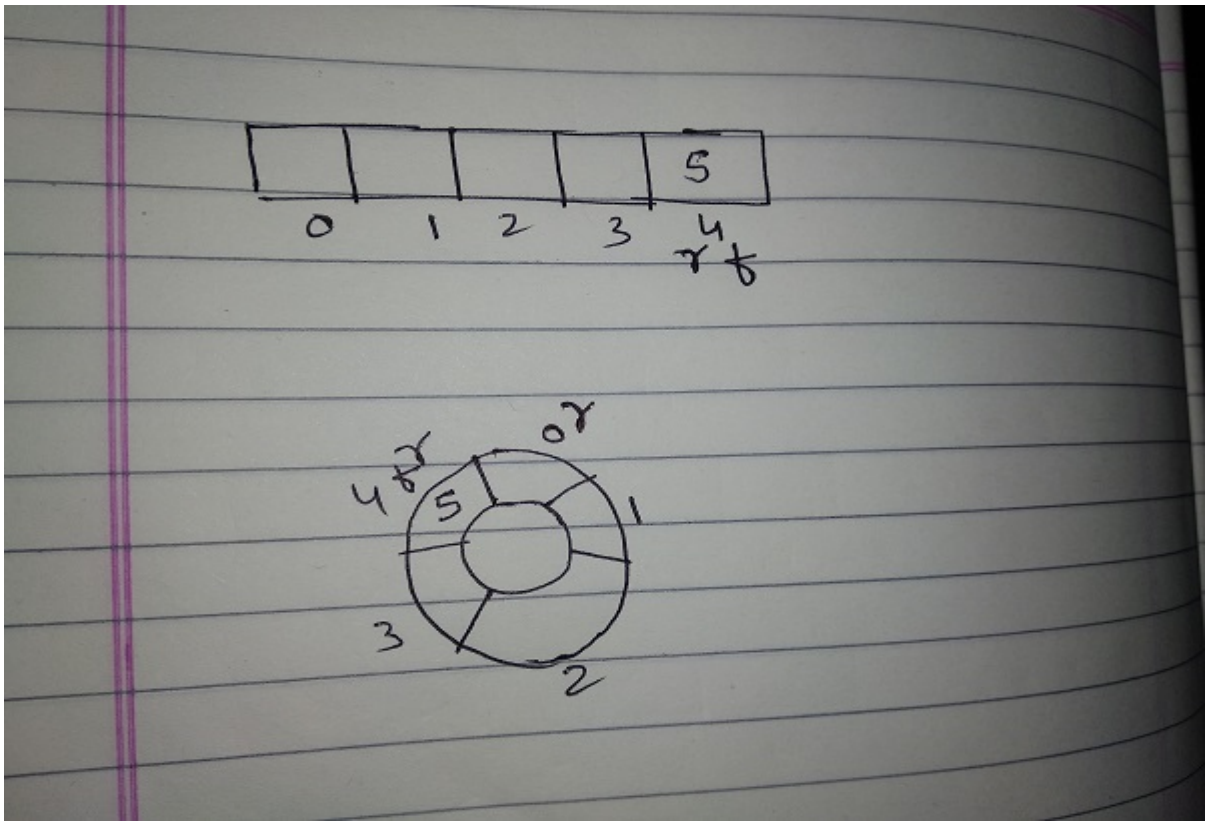
Delete element from queue using front end of list.

Display(): if queue is empty return false

else

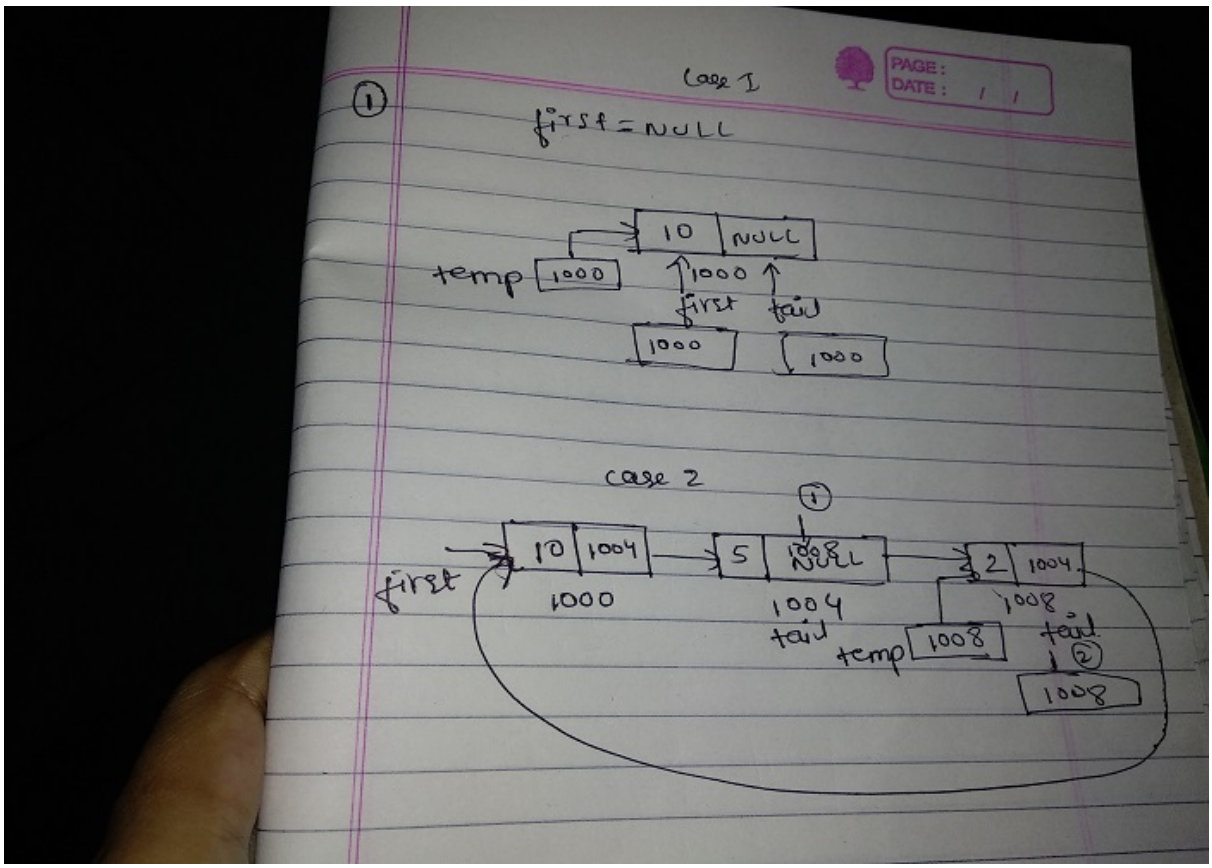
Display all elements of queue

Disadvantage of linear queue



Circular queue using linked list

```
struct node
{
        int data;
        struct node *link;
}
struct node *first,*tail;
void circularlist()
{
        struct node *temp;
        temp=(struct node *) malloc(sizeof(struct node))
        printf("enter the element");
        scanf("%d",&temp->data);
        temp->link=NULL:
        if(first==NULL)
        {
                first=temp;
                tail=temp;
        }
        else
        {
                tail->link=temp;
                tail=temp;
                tail->link=first;
        }
}
```



Deletion

Void delete()

{

```
Struct node *p;

p=first ;
first=first->link ;
tail->link=first;
free(p);
```

}