

```
#include<stdio.h>
#include<malloc.h>
void Insert();
void Delete();
void Display();
void exit();
struct node
{
    int data;
    struct node *next;
}*front=NULL,*rear=NULL;
int main()
{
    int choice;
    printf("\nQUEUE OPERATIONS USING ARRAY");
    printf("\n-----");
    printf("\n 1.INSERT\n 2.DELETE\n 3.DISPLAY\n 4.EXIT");
    while(1)
    {
```

```
printf("\nEnter the Choice:");  
scanf("%d",&choice);  
switch(choice)  
{  
    case 1:  
    {  
        Insert();  
        break;  
    }  
    case 2:  
    {  
        Delete();  
        break;  
    }  
    case 3:  
    {  
        Display();  
        break;  
    }  
    case 4:
```

```

        {
            exit(1);
        }
        default:
        {
            printf ("\nPlease Enter a Valid
Choice(1/2/3/4)");
        }

    }
}

void Insert()
{
    struct node *p;
    int added_element;
    p=(struct node *)malloc(sizeof(struct node));
    printf(" Enter a value to be Adding in Queue:");
    scanf("%d",&added_element);
    p->data=added_element;

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    p->next=NULL;
    if(front==NULL)
        front=p;
    else
        rear->next=p;
    rear=p;
}
void Delete()
{
    struct node *p;
    if(front==NULL)
        printf("Queue Underflow\n");
    else
    {
        p=front;
        printf("Element deleted from Queue is : %d\n",p-
>data);
        front=front->next;
        free(p);
    }
}

```

```
}  
void Display()  
{  
    struct node *q;  
    q=front;  
    if(front==NULL)  
        printf("Queue is empty");  
    else  
    {  
        printf("Queue element is\n");  
        while(q!=NULL)  
        {  
            printf("%d\n",q->data);  
            q=q->next;  
        }  
    }  
}
```