Week 3 >

4/01/24

// Queue.

```
#include <stdio.h>
#define n 5

int main()
{
int queue[n], ch=1, front=0, rear=0, i, j=1, x=n;
printf("Queue using array");
printf("\n1. Inserting \n2. Deleting \n3. Display \n
                4. Exit");

while(ch)
{
printf("\n Enter the choice: ");
scanf("%d", &ch);
switch(ch)
{
case 1:
      if(rear==x)
        printf("\n Queue is full");
      else
      {
        printf("\n Enter no %d: ", j++);
        scanf("%d", &queue[rear++]);
      }
      break;
case 2:
      if(front==rear)
      {
      printf("\n Queue is empty");
      }
      else {
        printf("\n Deleted element is %d",
        x++;                    que[front++]);
}
```

```
        break;

case 3 :
        printf("In Queue elements are: \n");
        if (front == rear)
            printf("In Queue is empty");
        else
        {
            for (i= front; i< rear; i++)
            {
                printf("%d", queue[i]);
                printf("\n");
            }
            break;

case 4 :
            exit(0);

default :
            printf("wrong choice" Please see
                    the options");
        }
    }
}
return 0;
}
```

Output :-

```
Queue using array
1. Inserting
2. Deleting
3. Display
4. Exit

Enter the choice = 1
Enter number : 27

Enter the choice : 1
Enter number : 37

Enter the choice : 3
Queue elements are :
  27
  37

Enter the choice : 2
Deleted Element is 27

Enter choice : 4
Exit
```