SARASWATHI.B

```
#include <stdio.h>
#include <stdlib.h>
#define MAX 5
int front = 0;
int rear = -1;
int queue [MAX];
Void Enqueue (int);
int Deque();
Void display();
int main (int argc, char **argv)
{
   int option;
   int item;
   do {
       Printf("\n 1. Insert to queue (Enqueue)");
       Printf ("\n 2. delete from queue (Dequeue)");
       Printf("\n 3. Display the content ");
       Printf("\n 4. Exit \n");
       Printf("\n Entel the option : ");
       scanf("%d", &option);
       switch (option)
       {
       case 1: printf ("Enter the element \n");
               scanf("%d", &item);
               Enqueue(item);
               break;
```

```
case 2: item = Deque();
        if (item == -1)
        Printf ("Queue is empty \n");
        else
        Printf ("Removed element from the queue %d",
        item);
        break;
case 3: display();
        break;
case 4: exit (0);
 }
} while (option!=4);
return 0;
}
Void Enque (int ele)
 {
  If(rear == Max-1)
   Printf ("Queue is full \n");
   else
   {
    rear++;
   queue[rear]= ele;
  }
}
intDeque()
 {
  int item;
   if (front == -1)
     return -1;
     else
```

```
item = queue [front];
front ++ ;
if(front > rear )
 {
 front = -1;
 rear = -1;
 }
 return item;
}
}
void display ()
{
 int i;
 if (front == -1)
 Printf ("queue is empty\n");
 else
 {
 Printf ("\n queue contents : ");
 for(i=front; i<= rear ; i++ )
  Printf ("%d", queue[i]);
 }
}
```