WEEK 3

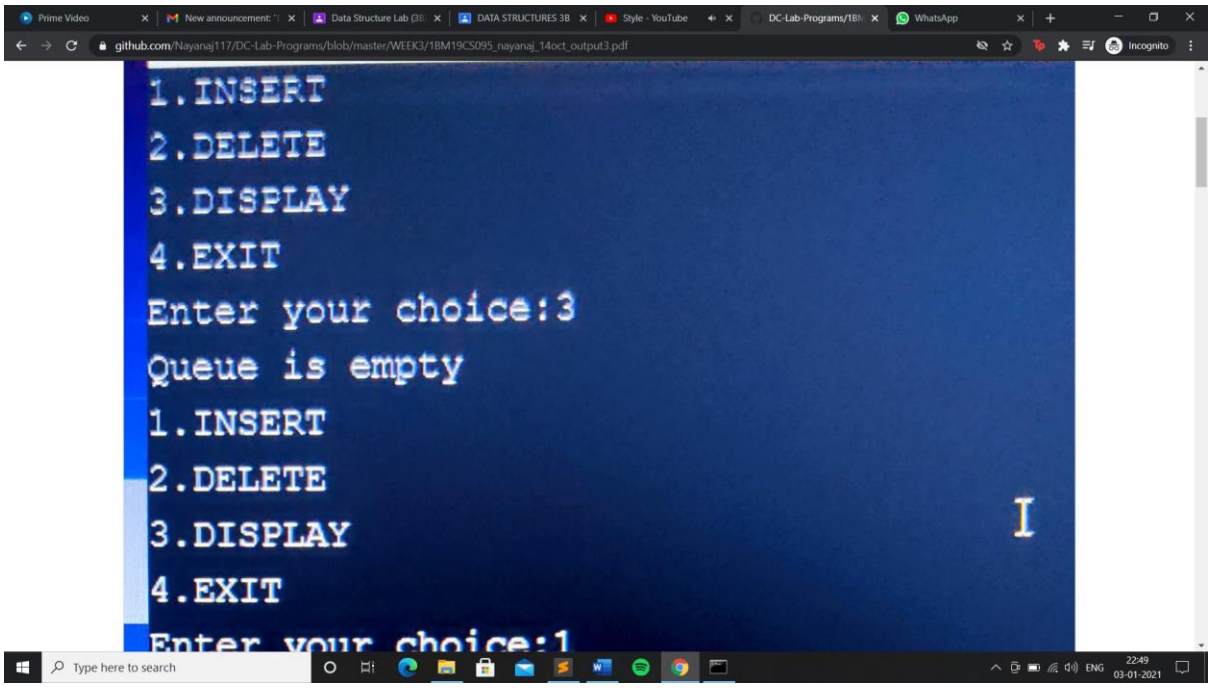
PROGRAM:

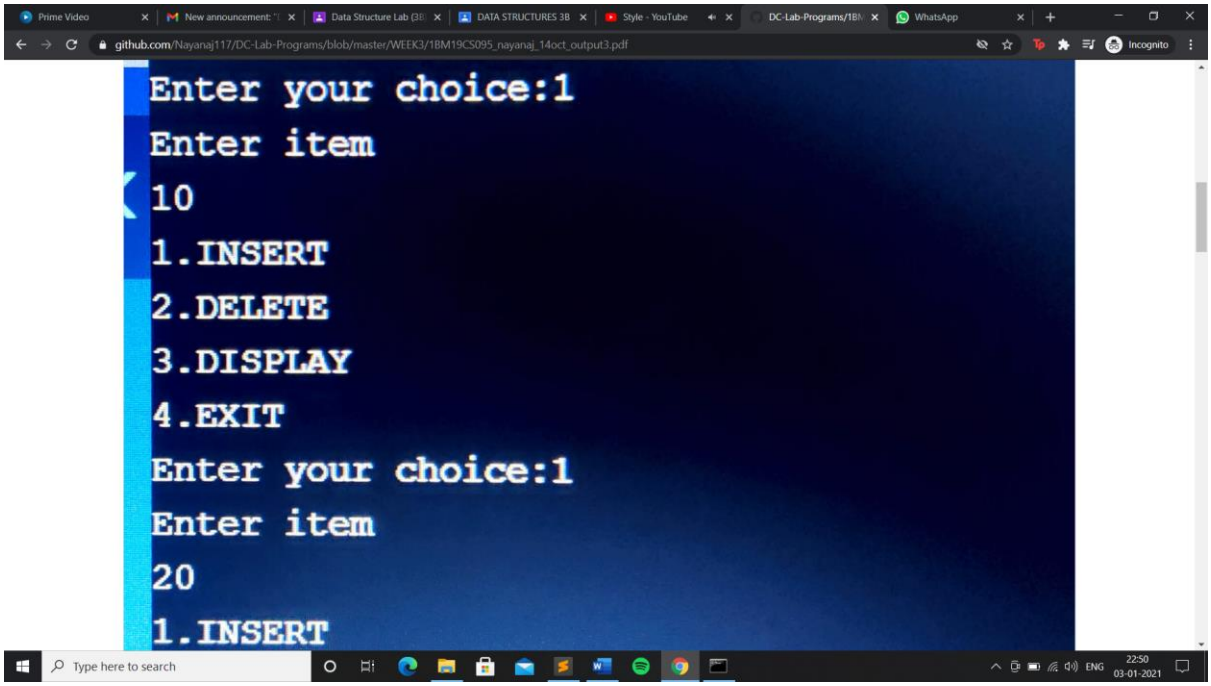
```
#include<stdio.h>
#include<conio.h>
#include<stdlib.h>
#define QUE_SIZE 3
int item,front=0,rear=-1,q[10];
void insert()
{
if(rear==QUE_SIZE -1)
{
printf("Queue Overflow \n");
return;
}
rear=rear+1;
q[rear]=item;
}
int delete()
{
if(front>rear)
{
front=0;
rear=-1;
return(-1);
}
return(q[front++]);
}
void display()
{
```

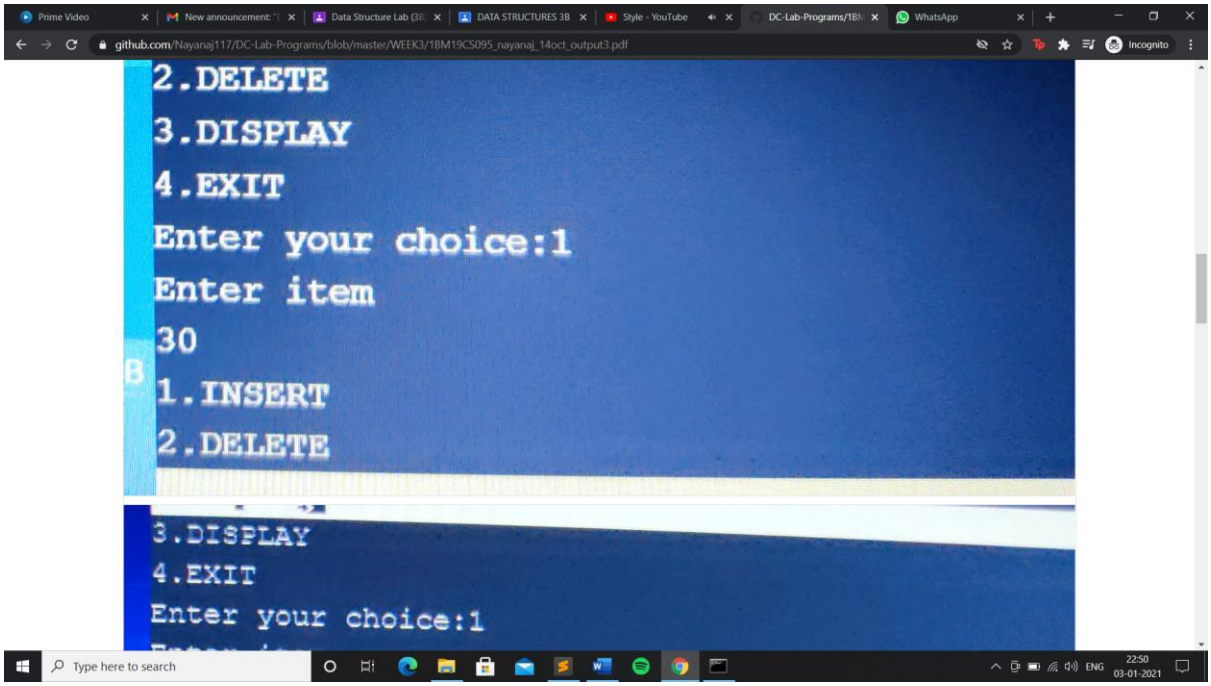
```
if(front>rear)
{
printf("Queue is empty \n");
return;
}
printf("Contents of queue :\n");
for(int i=front;i<=rear;i++)
printf("%d \n",q[i]);
}
void main()
{
int n;
for(;;)
{
   printf("1.INSERT \n2.DELETE \n3.DISPLAY \n4.EXIT\n");
   printf("Enter your choice:");
   scanf("%d",&n);
   switch(n)
   {
      case 1:printf("Enter item \n");
      scanf("%d",&item);
      insert();
      break;
      case 2:item=delete();
      if(item==-1)
         printf("Queue is empty\n");
      else
         printf("Deleted item : %d\n",item);
      break;
      case 3:display();
      break;
```

```
        default:exit(0);
    }
}
}
```

OUTPUT:




Prime Video
New announcement: "I
Data Structure Lab (3E
DATA STRUCTURES 3B
Style - YouTube
DC-Lab-Programs/1BM
WhatsApp
github.com/Nayanaj117/DC-Lab-Programs/blob/master/WEEK3/1BM19CS095_nayanaj_14oct_output3.pdf
Incognito
Enter your choice:1
Enter item
10
1.INSERT
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:1
Enter item
20
1.INSERT
Type here to search
ENG
22:50
03-01-2021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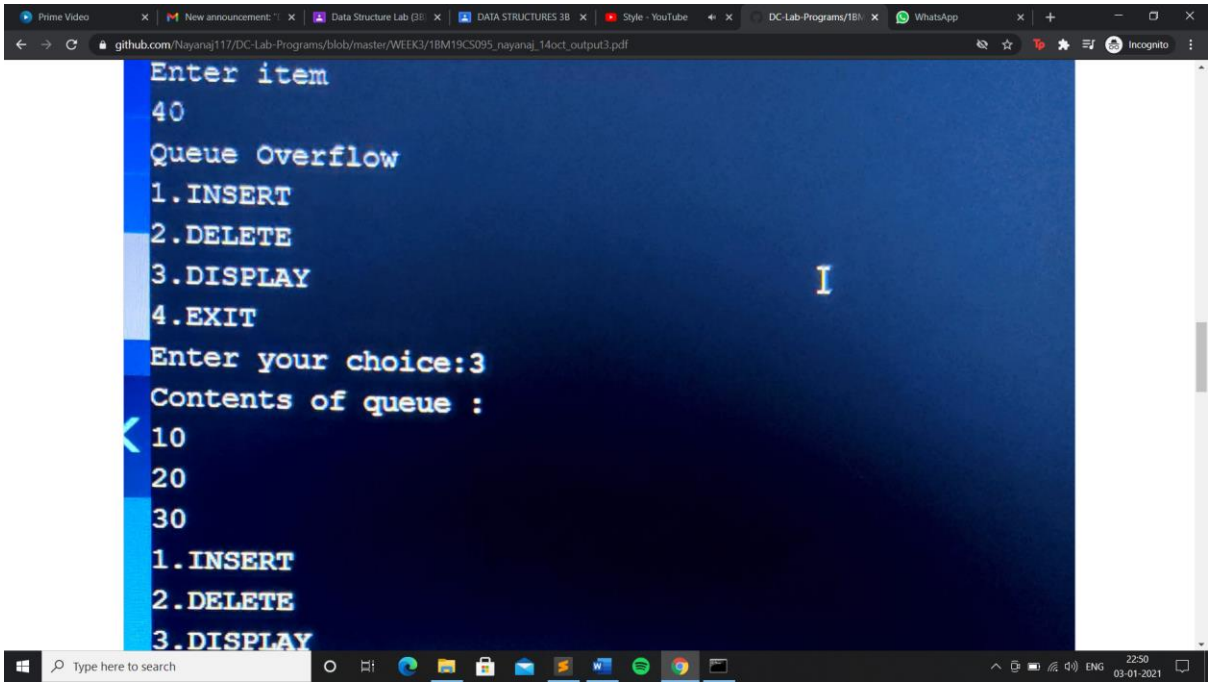
WhatsApp
github.com/Nayanaj117/DC-Lab-Programs/blob/master/WEEK3/1BM19CS095_nayanaj_14oct_output3.pdf
Incognito
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:1
Enter item
30
1.INSERT
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:1
Type here to search
ENG
22:50
03-01-2021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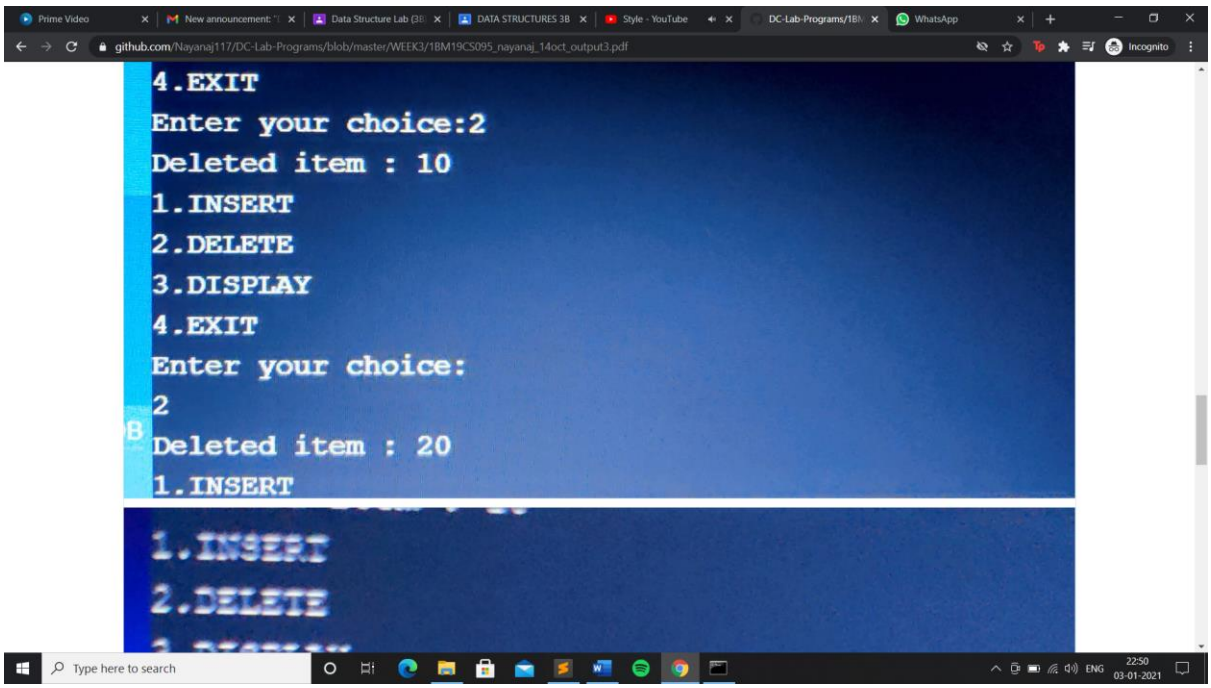
DC-Lab-Programs/1BM
WhatsApp
github.com/Nayanaj117/DC-Lab-Programs/blob/master/WEEK3/1BM19CS095_nayanaj_14oct_output3.pdf
Incognito
Enter item
40
Queue Overflow
1.INSERT
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:3
Contents of queue :
10
20
30
1.INSERT
2.DELETE
3.DISPLAY
Type here to search
ENG
22:50
03-01-2021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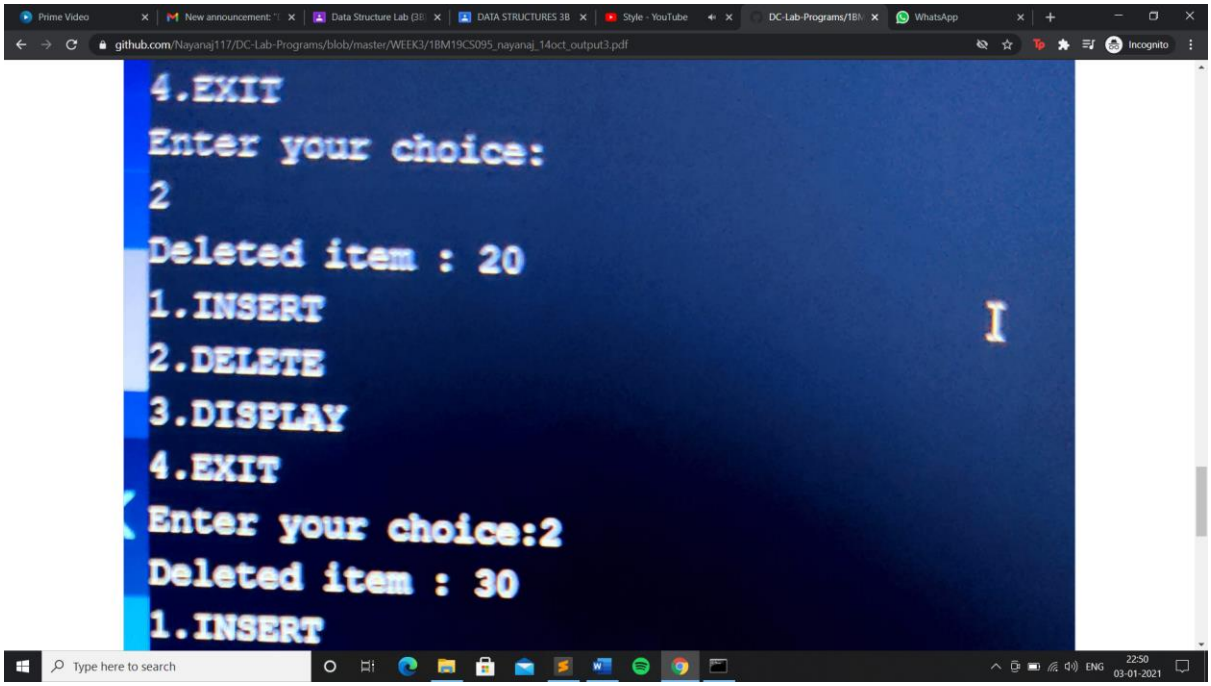
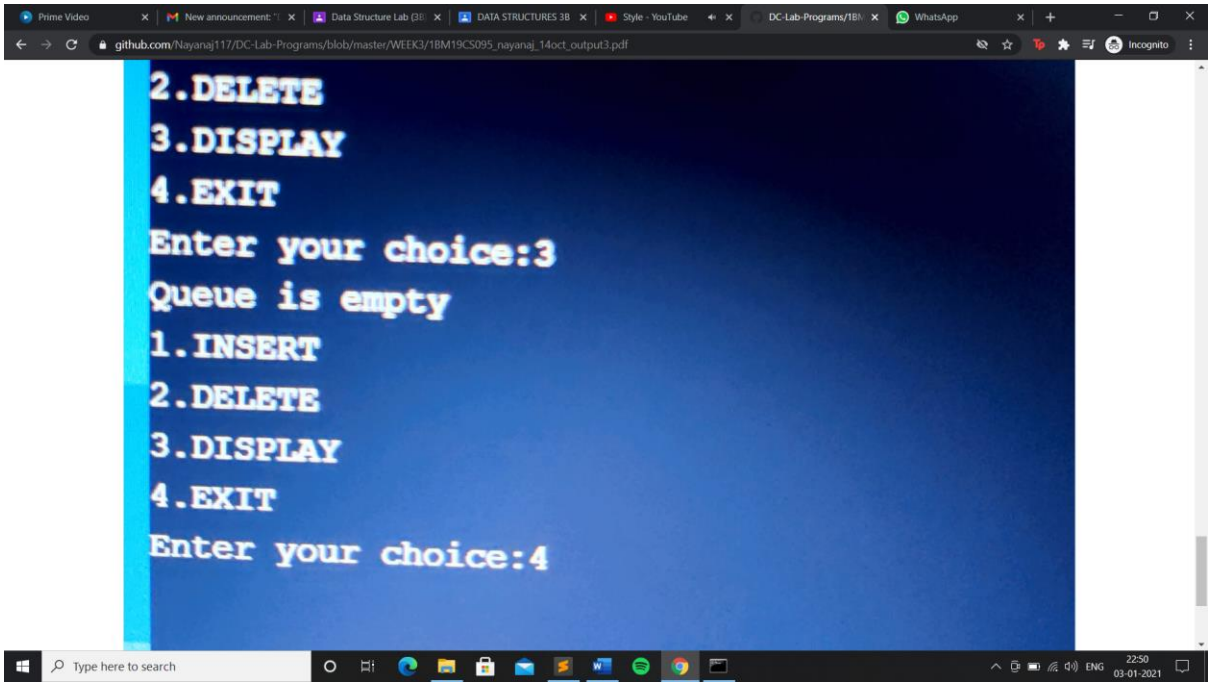
WhatsApp
github.com/Nayanaj117/DC-Lab-Programs/blob/master/WEEK3/1BM19CS095_nayanaj_14oct_output3.pdf
Incognito
4.EXIT
Enter your choice:2
Deleted item : 10
1.INSERT
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:
2
Deleted item : 20
1.INSERT
1.INSERT
2.DELETE
Type here to search
ENG
22:50
03-01-2021


github.com/Nayanaj117/DC-Lab-Programs/blob/master/WEEK3/18M19CS095_nayanaj_14oct_output3.pdf
4.EXIT
Enter your choice:
2
Deleted item : 20
1.INSERT
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:2
Deleted item : 30
1.INSERT
Type here to search
ENG
22:50
03-01-2021


github.com/Nayanaj117/DC-Lab-Programs/blob/master/WEEK3/18M19CS095_nayanaj_14oct_output3.pdf
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:3
Queue is empty
1.INSERT
2.DELETE
3.DISPLAY
4.EXIT
Enter your choice:4
Type here to search
ENG
22:50
03-01-2021