WEEK-02

IMPLEMENTATION OF QUEUE

#include<stdio.h>

#include<conio.h>

#define size 3

int queue[size],rear=-1,front=0,item;

void push();

void pop();

void display();

void main()

{

int choice;

while(1)

{

printf("\n1.Push into Stack\n2.Pop from Stack\n3.Display Stack\n4.Exit\n");

printf("Enter your choice:");

scanf("%d",&choice);

switch(choice)

{

case 1: push();

break;

case 2: pop();

break;

case 3: display();

break;

case 4: exit(0);

break;

default: printf("WRONG CHOICE\n");

}

}

getch();

}

void push()

{

if(rear==size-1)

{

printf("Queue is full");

}

else

{

printf("Enter an element\n");

scanf("%d",&item);

rear++;

queue[rear]=item;

}

}

void pop()

{

int del;

if(rear==-1)

{

printf("Queue is empty");

}

else

{

del=queue[front];

front++;

if(front==size)

{

front=0;

rear=-1;

}

}

}

void display()

{

int i;

if(rear==-1)

{

printf("Queue is empty");

}

else

{

for(i=front;i<=rear;i++)

{

printf("%d",queue[i]);

}

}

}

OUTPUT:

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:1

Enter an element

23

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:1

Enter an element

45

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:1

Enter an element

67

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:3

234567

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:1

Queue is full

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:2

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:3

4567

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:2

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:3

67

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:2

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:3

Queue is empty

1.Push into Stack

2.Pop from Stack

3.Display Stack

4.Exit

Enter your choice:4

Process returned 0 (0x0) execution time : 56.901 s

Press any key to continue.

