**Assignment No : 1.4**

**Title : Implementation of program based on Queue.**

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#include<iostream.h>

#include<conio.h>

class QUEUE\_82

{

private:

int \*A,size,front,rear,ele;

public:

QUEUE\_82(int);

void QUEUE\_ADD\_82(int ele);

int QUEUE\_DEL\_82();

void LIST\_ALL\_82();

};

QUEUE\_82::QUEUE\_82(int par)

{

front=rear=0; size=par;

A=new int[size+1];

}

void QUEUE\_82::QUEUE\_ADD\_82(int ele)

{

if(rear==size)

{

cout<<"List is full"<<endl;

return;

}

else

if(front==0)

{

front=1;

}

rear=rear+1;

A[rear]=ele;

}

int QUEUE\_82::QUEUE\_DEL\_82()

{

if(front==0)

{

cout<<"QUEUE is empty";

return NULL;

}

int ele=A[front];

if(front==rear)

front=rear=0;

else

front=front+1;

cout<<ele<<"is deleted";

return ele;

}

void QUEUE\_82::LIST\_ALL\_82()

{

cout<<"Elements of QUEUE are: "<<endl;

if(front==0)

{

cout<<"QUEUE is empty";

return;

}

else

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

{

cout<<A[i]<<"\t";

}

}

void MENU()

{

int ele,size,opt;

cout<<"Enter size of QUEUE : "<<endl;

cin>>size;

QUEUE\_82 obj(size);

do

{

cout<<"\n 1.ADD QUEUE";

cout<<"\n 2.DELETE QUEUE";

cout<<"\n 3.LIST ALL";

cout<<"\n 4.EXIT"<<endl;

cout<<"Enter your option : "<<endl;

cin>>opt;

switch(opt)

{

case 1:

cout<<"Enter ele to add in QUEUE: ";

cin>>ele;

obj.QUEUE\_ADD\_82(ele);

break;

case 2:

ele=obj.QUEUE\_DEL\_82();

break;

case 3:

obj.LIST\_ALL\_82();

break;

case 4:

return;

}

}while(1);

}

void main()

{

clrscr();

MENU();

getch();

}