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#include<stdio.h>
#define SIZE 5
int A[SIZE];
int f=-1,r=-1;

void push()
{ int x;
  if((f==r+1 )|| (f== 0 && r==SIZE-1))
    printf("\n Queue is full \n");
  else{
    printf(" enter the element to be inserted : \n");
    scanf("%d",&x);
    if(f==-1)
      f=0;
    r=(r+1)%SIZE;
    A[r]=x;
  }
}

int pop()
{
  int x;
  if(f==-1)
    printf("\n Queue is empty \n");
  else{
    x=A[f];
    if(f==r)
    {
      f= -1;
      r=-1;
    }
    else{
      f= (f+1)%SIZE;
    }
    return x;
  }
}
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    }
    return x;
}

void display()
{
    int i;
    if(f==-1)
        printf("Queue is empty \n ");
    else{
        for(i=f;i!=r;i=(i+1)%SIZE)
        {
            printf("%d ",A[i]);
        }
        printf("% d", A[i]);
    }
}

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}
void main()
{
    int op;
    printf("\n MENU ");
    printf("\n1.Push\n2.Pop\n3.Display\n4.EXIT");

    do{
        printf("\nEnter your option :");
        scanf("%d",&op);
        switch(op)
        {
            case 1: push();
                    break;
            case 2: pop();
                    break;
            case 3: display();
                    break;
            case 4: exit(0);
                    break;
        }
    } while(op!=4);
}

```

```
}  
void display()  
{  
    int i;  
    if(f== -1)  
        printf("Queue is empty \n ");  
    else{  
        for(i=f; i!=r; i=(i+1)%SIZE)  
        {  
            printf("%d ", A[i]);  
        }  
        printf("% d", A[i]);  
    }  
}
```

```
}  
void main()  
{  
    int op;  
    printf("\n MENU ");  
    printf("\n1.Push\n2.Pop\n3.Display\n4.EXIT");  
  
    do{  
        printf("\nEnter your option :");  
        scanf("%d",&op);  
        switch(op)  
        {  
            case 1: push();  
                    break;  
            case 2: pop();  
                    break;  
            case 3: display();  
                    break;  
        }  
  
    } while(op!=4);  
}
```