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#include<stdio.h>
int f=-1,r=-1,i,max,x,c,a[10];
void enqueue();
void dequeue();
void display();
void main()
{
	printf("Enter the max value of queue: ");
	scanf("%d",&max);
	do
	{
		printf("\n1.Enqueue\n2.Dequeue\n3.Display\n4.Exit\nEnter your choice: ");
		scanf("%d",&c);
		switch(c)
		{
			case 1:
			enqueue();
			break;
			case 2:
			dequeue();
			break;
			case 3:
			display();
			break;
			case 4:
			printf("The program has exited");
			break;
			default:
			printf("Invalid choice");
		}
	}while(c!=4);
}
void enqueue()
{
	if((r+1)%max==f)
	{
		printf("Overflow");
	}
	else if(f==-1&&r==-1)
	{
		f=0;
		r=0;
		printf("Enter the element: ");
		scanf("%d",&a[r]);
```

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        }
        else
        {
                r=r+1;
            printf("Enter the element: ");
            scanf("%d",&a[r]);
        }
}
void dequeue()
{
        if(f==-1)
        {
            printf("Underflow");
        }
        else if(f==r)
       {
            printf("The deleted element is %d",a[f]);
            f=-1;
            r=-1;
        }
        else
        {
            printf("The deleted element is %d",a[f]);
            f=(f+1)%max;
        }
}
void display()
{
          if(r>=f)
          {
          for(i=f;i<=r;i++)
          {
                printf("\t%d",a[i]);
          }
          }
          else
          {
                for(i=f;i<=max-1;i++)
                {
                        printf("\t%d",a[i]);
                }
          }
}
```