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Q) Connect relay, power supply, bulb with Arduino as you have done in class example. Also attach the potentiometer with analog input of Arduino and map its range from 0-100. Now when potentiometer value is from 50- 100 so energize the coil else it will remain un energize.

```
const int pin = 13;
```

```
void setup(){
```

```
    pinMode(A0, INPUT);
```

```
    pinMode(pin, OUTPUT);
```

```
}
```

```
void loop(){
```

```
    int a;
```

```
    a = analogRead(A0);
```

```
    int b = map(a,0,1023,0,100);
```

```
    if(b > 50 && b < 100 ){
```

```
        digitalWrite(pin, HIGH);
```

```
        delay(1000);
```

```
        digitalWrite(pin, LOW);
```

```
        delay(1000);
```

```
    }
```

```
    else{
```

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```
digitalWrite(pin, LOW);
```

```
}
```

```
}
```

Q1) What is the basic difference between NC & NO Cirtuit?

ANSWER:

NO contacts allow the current when the relay or contactor is energized and NC contacts allow current through when the relay or contactor is not energized.

Q2) What is COM and what is it used for?

ANSWER:

COM is a terminal and it represents contact terminal`s symbols.

Q3) Write applications where Relay is used?

ANSWER:

- Electrical fuel pump.
- Motor control.
- Control of high voltages.