if-else Statement

An if-else Statement is one way you allow a computer to make a decision. With this command, the program will check the (condition) and then execute one of two pieces of code, depending on whether the (condition) is true or false.

Below is the pseudocode outline of an if-else Statement.

```c
if (condition)
{
    // true-commands
}
else
{
    // false-commands
}
```

(Condition)
Either true or false (see Reference > Boolean Logic).

(true) commands
Commands placed here will run if the (condition) is true.

(false) commands
Commands placed here will run if the (condition) is false.

Below is an example program containing an if-else Statement.

```c
task main()
{
    bMotorReflected[port2]=1;
    while (true)
    {
        if (SensorValue(sonarSensor)>25)
        {
            motor[port3]=127;
            motor[port2]=127;
        }
        else
        {
            motor[port3]=0;
            motor[port2]=0;
        }
    }
}
```

(condition)
true if the sensor reads over 25
false otherwise

(true) commands
These commands run if the (condition) is true.

(false) commands
These commands run if the (condition) is false.

This if-else Statement tells the robot to run both motors at full power if the nearest object the Ultrasonic Range Finder detects is more than 25 inches away. If the Ultrasonic Range Finder detects an object closer than 25 inches, then the “else” portion of the code will be run and the robot will stop moving. The outer while(true) loop makes the if-else statement run over and over forever.