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 Statment.

Below is an example program containing an If/Else Statement.

```
task main()
while (true)
       (SensorValue(sonarSensor)>25)
                                                       (condition)
                                                       true if the sensor reads over 25
                                                       false otherwise
      motor[motorC]=100;
                                                       (true) commands
      motor[motorB] = 100;
                                                       These commands run if
                                                       the (condition) is true.
   else
      motor[motorC] = 0;
                                                       (false) commands
      motor[motorB] = 0;
                                                       These commands run if
                                                       the (condition) is false.
```

This if-else Statement tells the robot to run both motors at 100% if the nearest object the Ultrasonic Sensor detects is more than 25 centimeters away. If the sonar sensor detects an object closer than 25 centimeters, 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.