ENGINEERING FLOWCHART

DOES IT MOVE?

NO

SHOULD IT?

NO

PROBLEM

YES

WD-40

NO

PROBLEM

YES

SHOULD IT?

NO

PROBLEM

YES

NO

PROBLEM
Calculate the absolute value

is x < 0?

yes

multiply x by -1

no

return x
def absolute(x):
    if x < 0:
        x = x * -1
    return x
Basic conditional statement

A condition is any Boolean expression. i.e., it evaluates to either True or False.

Like functions, conditional statements form blocks using colons and indentation. All statements within the block are executed if the condition is true.
def absolute(x):
    if x < 0:
        return -x
    else:
        return x
is score >= 90? yes
no

is score >= 80? yes
no

is score >= 70? yes
no

is score >= 60? yes
no

return 'A'
return 'B'
return 'C'
return 'D'
return 'F'
```python
def assignGrade(score):
    if score >= 90:
        return 'A'
    else:
        if score >= 80:
            return 'B'
        else:
            if score >= 70:
                return 'C'
            else:
                if score >= 60:
                    return 'D'
                else:
                    return 'F'
```
def assignGrade(score):
    if score >= 90:
        return 'A'
    elif score >= 80:
        return 'B'
    elif score >= 70:
        return 'C'
    elif score >= 60:
        return 'D'
    else:
        return 'F'

eelif is just short of 'else if'. it is a way to eliminate excessive indentation of nested conditions