

Start

Init adxl variable

**SET UP**

- Set activity/ inactivity threshold
- Set activity/ inactivity/ tap detection on axes
- Set value for tap and double tap
- Set value Free-fall threshold and duration
- Set interrupt

**LOOP**

init array acc[ ]

i = 1

No

i <= 6?

Yes

Get value sensor  
Store in array acc

No

i = 6?

Yes

Calculate statistics  
value along 3 axis

Statistics value:  
mean, standard  
deviation, median,  
range, rms

Yes

med\_z <= 1.012

No

Yes

range\_z <= 0.007

No

std\_y <= 0.025

Yes

No

Yes

range\_z <= 3.339

No

No

std\_x <= 0.493

No

Yes

rms\_x <= 0.7333

No

std\_x <= 0.051

No

Yes

rms\_y <= 0.44

Yes

No

Yes

"Standing"

"Walking"

Running

"Sitting"

i ++

End

