

10.Compass

```
on button A pressed
  calibrate compass

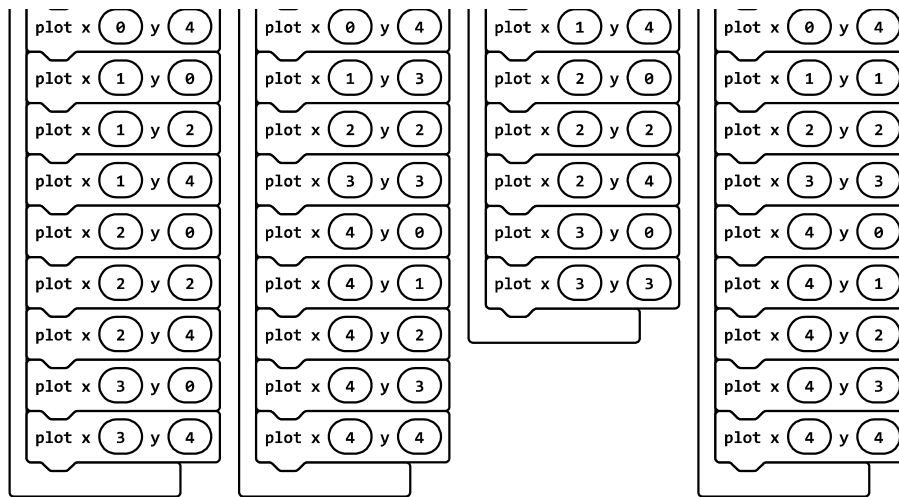
forever
  set compass to compass heading (°)
  if compass >= 340 or compass <= 20 then
    clear screen
    call S
    Tobbie-II walking forward
    pause (ms) 1000
    Tobbie-II stop walking
  else if compass >= 21 and compass <= 120 then
    play tone Middle C for 1/8 beat
    clear screen
    call W
    Tobbie-II turns left
    pause (ms) 100
    Tobbie-II stops rotating.
  else if compass >= 211 and compass <= 339 then
    play tone Middle C for 1/8 beat
    clear screen
    call E
    Tobbie-II turns right
    pause (ms) 100
    Tobbie-II stops rotating.
  else if compass >= 110 and compass <= 210 then
    play tone Middle C for 1/8 beat
    clear screen
    call N
    Tobbie-II turns right
    pause (ms) 150
    Tobbie-II stops rotating.
```

```
function E
  plot x 0 y 0
  plot x 0 y 1
  plot x 0 y 2
  plot x 0 y 3
```

```
function W
  plot x 0 y 0
  plot x 0 y 1
  plot x 0 y 2
  plot x 0 y 3
```

```
function S
  plot x 0 y 1
  plot x 0 y 4
  plot x 1 y 0
  plot x 1 y 2
```

```
function N
  plot x 0 y 0
  plot x 0 y 1
  plot x 0 y 2
  plot x 0 y 3
```



Extensions

- radio, *
- Tobbiell, github:kaku111/pxt-tobbieii#v2,0,1