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#2/13/2022
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#Lab 05 - Turtle Control
```

```
import turtle
import random
```

```
win = turtle.Screen()
win.bgcolor('cyan')
```

```
vanilla=turtle.Turtle()
vanilla.shape('turtle')
vanilla.color('red')
speed = 3
running = True
```

```
def go_left():
    vanilla.left(90)
```

```
def go_right():
    vanilla.right(90)
```

```
def faster():
    global speed
    speed = speed + 0.5
```

```
def slow_down():
    global speed
    if speed > 1:
        speed = speed - 0.5
    else:
        speed = 1
```

```
def return_origin():
    turtle.penup()
    turtle.home()
    turtle.pendown()
```

```
def turn_pink():
    vanilla.color('pink')
```

```
def change_shape():
    vanilla.shape('circle')
```

```
def go_home():
    vanilla.penup()
    vanilla.setposition(0,0)
    vanilla.pendown()
```

```
win.listen()
```

```
win.onkey(go_left,'Left')
win.onkey(go_right,'Right')
win.onkey(faster,'Up')
win.onkey(slow_down,'Down')
win.onkey(turn_pink, 'a')
win.onkey(change_shape,'b')
win.onkey(go_home,'space')
```

```
#My 2 additional buttons are with keys 'a' and 'b'
#The first turns my turtle pinnk by pressing the 'a' key, activating the function
#The second changes my turtle's shape from a turtle to a circle by pressing the 'b' key
```

```
vanillamoves = 0
```

```
while running:
    vanilla.forward(speed)
    vanillamoves +=1
    if vanillamoves % 30 == 0:
        vanillamoves.left(random.randint(0,359))
```