Laboratory Exercise
Python's Turtle Part 2

Objective:

At the end of the exercise, the students should be able to:

- Draw shapes using custom functions and keyboard input.

Software Requirement:

- Python 3.7 or higher

Procedure:

1. Launch **IDLE**.
2. Import the **turtle** module and set up your turtle.
3. Create four (4) functions for the turtle's movement. To make the turtle move without drawing, use `penup()`. Use `setheading()` to set the turtle's orientation. Refer to the following table and sample code.

East	0
North	90
West	180
South	270

```
def move_left():
    t.penup()
    t.setheading(180)
    t.fd(100)
```

4. To capture events, set the focus on the screen by entering the following statements.

```
screen = turtle.Screen()
screen.listen()
```

5. Use `onkey()` to assign the keyboard keys to your created functions. **Example: `screen.onkey(move_left, "Left")`**

   The first argument is the name of the function you want to run, while the second argument is the string that represents the keyboard key you want to use.

6. Test the first `onkey()` event before creating another one. Debug your code if needed.
7. Add three (3) functions for the shapes you want to draw at your turtle's current position. Use `pendown()` in the first statement. You can use a for loop if you have repeating statements. See the following sample code.

```
def draw_square:
    t.pendown()
    for i in range(4):
        t.fd(50)
        t.rt(90)
    t.penup()
```

8. Using onkey(), assign keys for your shapes. Example: **screen.onkey(draw_square, "S")** **screen.onkey(draw_square, "s")**
9. Save a copy of your code for future use.

Grading Rubric:

CRITERIA	PERFORMANCE INDICATORS	POINTS
Functions	The program's functions are complete and correct.	30
Key Events	The key events are complete and working.	20
TOTAL		**50**