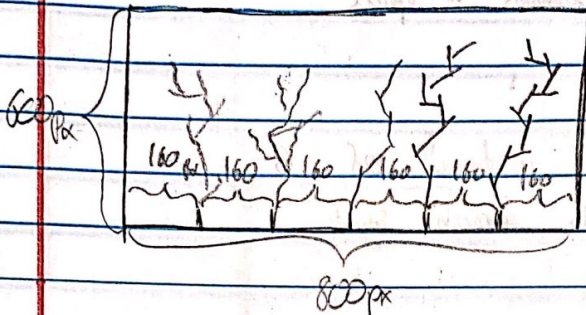


# ATLS 1300 PC04: Custom Pattern Pseudo Code.

Idea: randomly generated Coral field.



Need:

- turtle library
- random library
- "for" loops
- tuple of start positions (x, y)
- "range" lists
- 5 clones of the turtle
  - 1 for each coral branch.
- lots of random integer generators

Steps:

2.5) create  
Position tuple and  
Color variables

- 1) Import turtle and random libraries
- 2) Setup screen size and bg color
- 3) Create 5 turtle clones and move them to starting positions.
  - $t1 = \text{startPos}[0]$ ,  $t2 = \text{startPos}[1]$ ,  $t3 = \text{startPos}[2]$ , ...
- 4) Assign colors to turtles using a variable declared with:
  - Name = random.randint(0, 255)
  - Do this 6 times
  - Vary these variables between the 5 turtles so they're all different.

- 5) for i in range(7): # This creates the coral bases #  
 $t1$ .  $\text{set}(\text{random.randint}(0, 150))$

~~Not sure if this will work. Just an idea.~~

~~$t1$ . NAME (random.randint(0, 60))~~

~~$\rightarrow$  [NAME = right / left]~~ ← Will be defined earlier in script.

~~if NAME == right:~~

~~NAME = 1.00~~

~~else:~~

~~NAME = right~~

Switched to conditional to test all even values of i in range(10)

- 6) Use an 'if' statement to create branches when i is an even number.

- Needed if statement to chose angle for the branches.
- Chooses branch angle direction (right/left) depending on what the value of NAME is.



~~Optional~~  
Optional

7) Could add shunt to that sound den

- add to branches
- Save branch entry position to place the shunt

Notes: dropped to 4 states instead of 6

- using conditionals to grab branch start positions!