

CS6102– Computational Thinking

Week - 8

04 – Jan - 2023

Learn SCRATCH and Turtle Graphics

SCRATCH

1. Check the PPT/PDF tutorials shared for how to use SCRATCH, Turtle Graphics
2. Practice the following using **SCRATCH** (Using *Motion, Looks, Sound, Events, Control*)

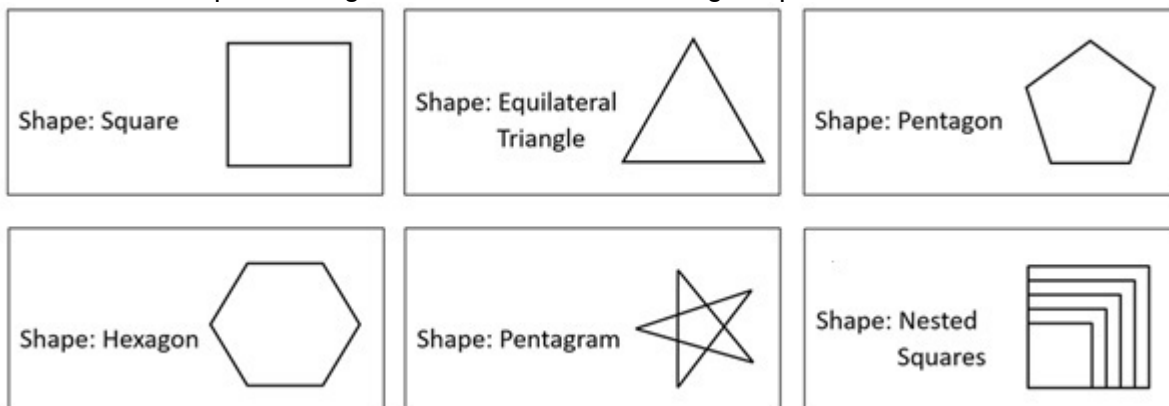
To begin with, write a simple scratch program (sequence of steps), (use flowchart wherever appropriate along with scratch program) for the following tasks and execute the same on your sprite using SCRATCH.

- a. Choose a cat sprite and make him say hello for 5 seconds
- b. Choose a backdrop accordingly (As cat is going to perform a dance)
- c. Add one more sprite (A host to say welcome to the audience)
- d. Make the cat sprite to say “Watch me dancing” for 2 seconds
- e. To make the cat dance, repeat the following steps for 10 times.
 - i) Rotate the cat sprite to 15 degrees.
 - ii) Move 50 steps forward
 - iii) Play drum for 0.5 beats
 - iv) move the sprite for 50 steps backward
 - v) Play drum for 0.5 beats
- f) Change the costume of cat sprite after waiting for 2 seconds
- g) Move the cat sprite 50 steps forward
- h) If the sprite finds any obstacle, make the sprite move 50 steps backward

Note: Explore alternate ways of getting the same effects

Turtle Graphics

3. Create Turtle Graphics using SCRATCH for the following shapes



4. Using scratch, design a script which would accomplish your sprites perform the following tasks.
- a) Draw a car
 - b) Draw a smiley Face
 - c) Draw a house
 - d) Draw a sail boat

