Some Quick Quiz Questions to get Started

1. What shapes will these snippets of code draw?
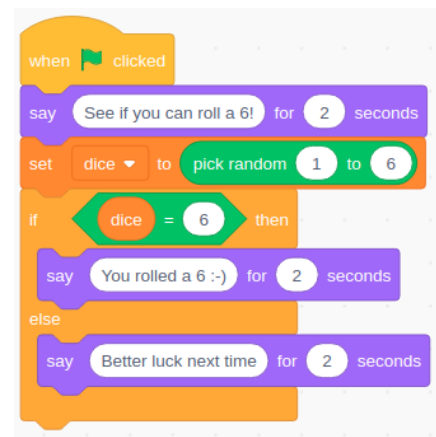
I
```
repeat 5
  move 100 steps
  turn ↻ 72 degrees
```

II
```
repeat 5
  move 100 steps
  turn ↻ 144 degrees
```

III
```
repeat 72
  move 10 steps
  turn ↻ 5 degrees
```

IV
```
repeat 4
  move 50 steps
  turn ↻ 90 degrees
  move 50 steps
  turn ↻ -90 degrees
```

V
```
repeat 100
  turn ↻ pick random -90 to 90 degrees
  move 20 steps
```

a. (pentagon)   b. (star)   c. (scribble)   d. (circle)   e. (zigzag)
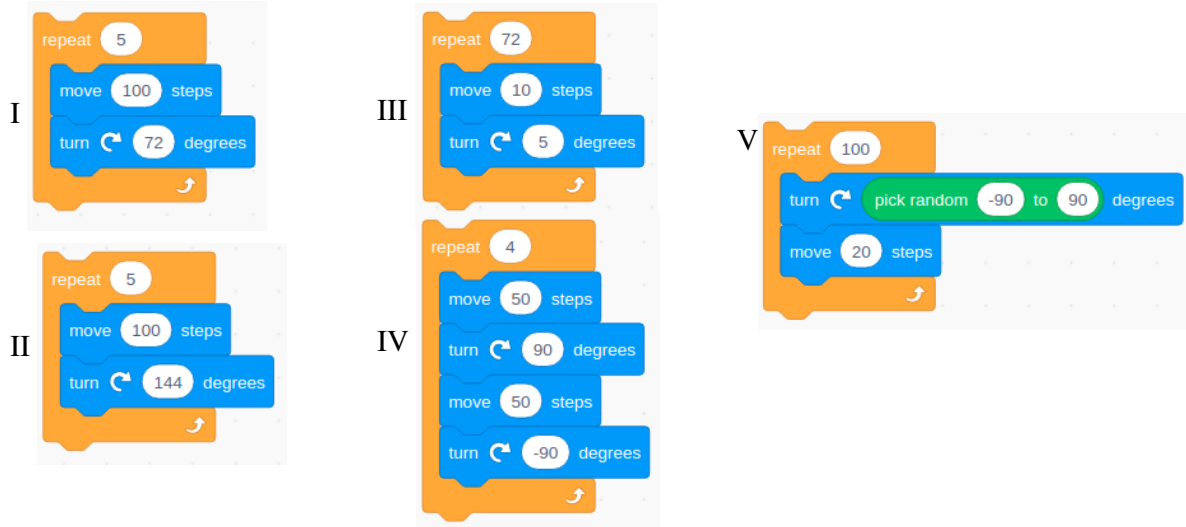
2. What is this code most likely to say?

   (a) You rolled a 6 :-)
   (b) Better luck next time
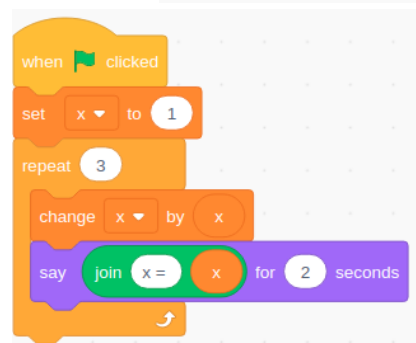
3. How often do you think it will say "You rolled a 6 :-)"?

   (a) About half the time
   (b) Never
   (c) About one in six times
   (d) Always
   (e) About five times out of every six

```
when 🏁 clicked
say See if you can roll a 6! for 2 seconds
set dice ▼ to pick random 1 to 6
if dice = 6 then
  say You rolled a 6 :-) for 2 seconds
else
  say Better luck next time for 2 seconds
```

4. What will this code say?

   (a) x = 1
       x = 2
       x = 3

   (b) x = 2
       x = 3
       x = 4

   (c) x = 1
       x = 2
       x = 4

   (d) x = 2
       x = 4
       x = 8

```
when 🏁 clicked
set x ▼ to 1
repeat 3
  change x ▼ by x
  say join x = x for 2 seconds
```

A Social Distancing Game on Scratch

You will need two sprites. The first is you. You have to move around using the arrow keys in order to avoid getting too close to anyone. `https://scratch.mit.edu/projects/390960994/`
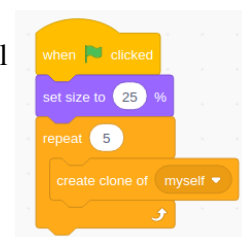
1. Choose a sprite for yourself and choose two costumes, alive and dead →

2. Next you need code to move your sprite around the screen ↓
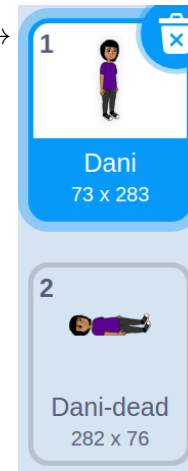
3. Choose another sprite – the infection one – and put a big circle around it to show what too close means→
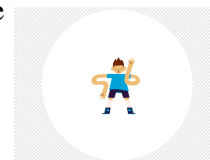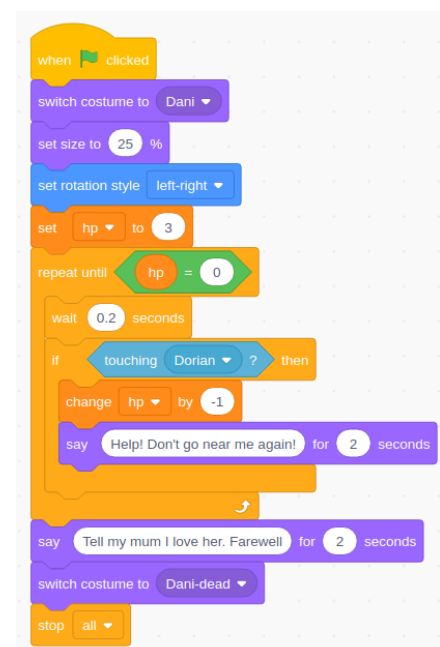
4. You want a few clones of the infectious guy. You also want him to be small so that he is easier to avoid. You can do with this code →

5. The infectious guys should move around: →

6. The sprite that you are moving around needs to lose "health points" (a variable) and finally die if she comes close to infectious guys too often: →

Challenges

1. Make your sprite gain health points (hp) after taking exercise.

2. Find ways to make the game easier or more difficult.

3. Make one of the sprites move towards the mouse.

4. Make the game get more difficult as time goes on.

Interact

1. Share your code and add it to the "Caversham Primary School" studio

2. Email `codeClub0@googlegroups.com` with questions and comments.