

Block 1

Computer Science Technical Assessment

There are 17 questions in this test and it will take about 25 minutes to finish the test. Please read the questions carefully before answering.
If you don't know the answer, please skip the question.

Click on Next when you are ready.

What is your participant ID?

Default Question Block

1. In coding, what is the function of a variable?

- ☐ Repeating code
- ☐ Checking if one value is equal to another
- ☐ Storing a value
- ☐ Communicating between two pieces of code
- ☐ Displaying a message

2. In which of the following pieces of code will the variable **sum** be equal to 10, after the code has finished running?

- ☐

```

set sum to 0
change sum by 1
change sum by 9
set sum to sum + 1

```
- ☐

```

set sum to 0
set sum to sum + 1
set sum to sum + 1
set sum to sum + 1

```
- ☐

```

set sum to 0
set sum to sum + 9

```
- ☐

```

set sum to 10
change sum by -1
set sum to sum + 1

```
- ☐

```

set sum to 5
set sum to sum + 9
change sum by -3

```

```

when clicked
  set grade1 to 90
  set grade2 to 95
  set sum to grade1 + grade2
  set average to sum / 2
  if average > 90
    say You got an A! for 2 secs
  else
    say You did not get an A. for 2 secs
  say Good job!

```

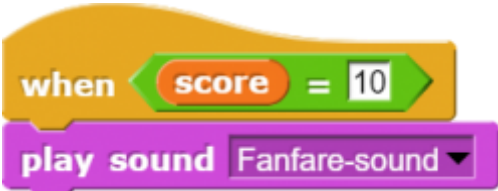
3. What is the numeric value of **average** after the code has finished running?

4. What is the output of the code shown in question number three?

5. In what situation would you need to use broadcasting while coding?

- ☐ To transmit information by radio or television
- ☐ Communicating between two different pieces of code
- ☐ To display a message to the user
- ☐ Playing a sound
- ☐ Showing an animation

6. Which of following is an example of using broadcasting in a game?

- ☐ A yellow Scratch block labeled "when green flag clicked" with a green flag icon, followed by a purple block labeled "say" with a dropdown menu showing "score".
- ☐ A yellow Scratch block labeled "when I receive" with a dropdown menu showing "Message from Character One", followed by a blue block labeled "move" with a dropdown menu showing "10" and the word "steps".
- ☐ A yellow Scratch block labeled "when" with a dropdown menu showing "score" and a green arrow pointing right with the number "10", followed by a purple block labeled "play sound" with a dropdown menu showing "Fanfare-sound".
- ☐ A yellow Scratch block labeled "when I am" with a dropdown menu showing "clicked", followed by a blue block labeled "move" with a dropdown menu showing "10" and the word "steps".



7. Select which code will say "You are a great coder!"





8. In an if/else block of code, when does the code under the "else" run?

- ☐ When the **if** statement condition is true
- ☐ When the **if** statement's condition is false
- ☐ After the code under the **if** runs
- ☐ The code under the **else** never runs
- ☐ The code under the **else** always runs



9. What will the above code say?

10. Which of the following code uses user **input**?



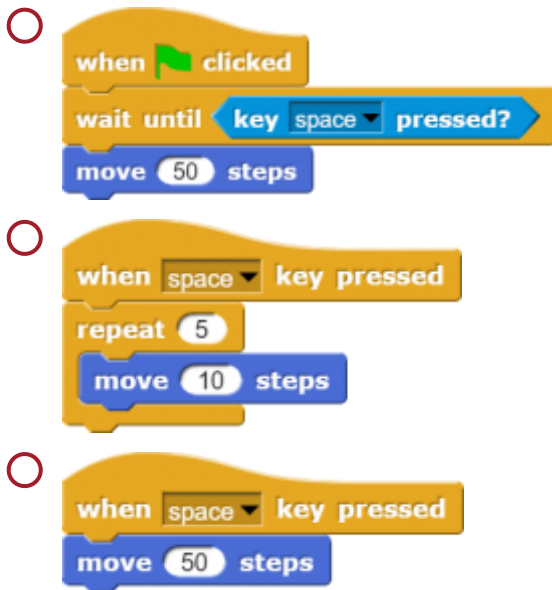
- ☐
- ☐
- ☐
- ☐

11. Which of these is an example of code **output**?

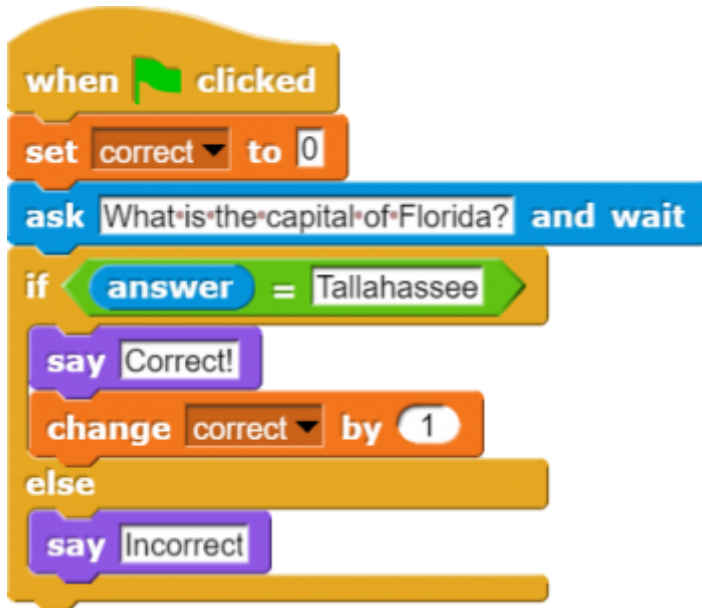
- ☐ Checking if a key is pressed
- ☐ Playing a sound
- ☐ Broadcasting
- ☐ Storing a value
- ☐ Creating a variable

12. Which code has an example of a loop?

- ☐
- ☐



13. What will the above code say? If multiple things are said, list them in the order they would be said.

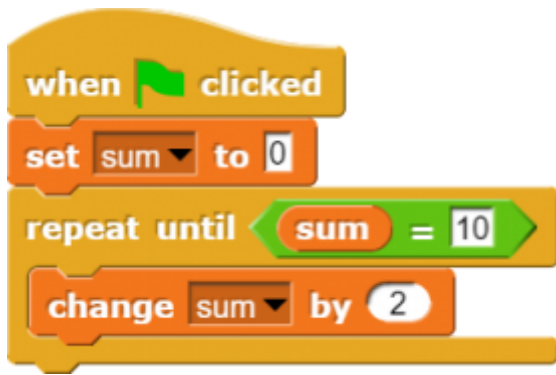


14. What is the numeric value of **correct** after the above code finishes, if the user enters “Jacksonville”?

15. What will the code above say if the user enters “Tallahassee”?

16. Consider the code in the question above. What would be the best use of a loop in a quiz game?

- ☐ Loop until the answer entered is correct
- ☐ Loop to say correct
- ☐ Loop to change the score
- ☐ Loop to display the question
- ☐ Loop to set the score



17. How many times is sum changed by 2 in the above code?

Block 2

Excellent! You are done with the Computer Science Technical Assessment!

Please click **next** to submit your responses and leave the assessment.



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