

Computing

Selection

Lesson 3 of 6

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Task 1 part 1: Predict

What do you predict will happen when the green flag is clicked?

Be as precise as you can (discuss **exactly** what you think will happen).

```
when green flag clicked
  say Hello! for 2 seconds
  say I'm Big Ed from the year 2182 for 4 seconds

define ask_name
  ask What's your name? and wait
  set name to answer
  say join Hello name for 2 seconds

define birthday
  say It's my birthday today for 2 seconds
  ask Is it your birthday today as well? and wait
  set birthday? to answer
  if birthday? = yes then
    say Happy Birthday for 2 seconds
  else
    say A very happy unbirthday to you for 2 seconds

define how_are_you
  ask Are you OK? and wait
  set health to answer
  if health = yes then
    say Good, glad to hear it for 2 seconds
  say I have another question for 2 seconds
```

Source: Scratch



Task 1 part 2: Predict

Write down below (in as much detail as you can) what you think the code will do



Task 1 part 3: Predict

Open the following Scratch program and select **See inside**

<https://oaknat.uk/3gjMFBz>

Were your predictions correct?	
Did anything surprise you about what happened when the code was executed?	
Did you miss anything out? If so, what?	



Task 2: Investigate - question 1

Question

What is the purpose of the following three blocks of code?

```
ask_name
```

```
how_are_you
```

```
birthday
```

Source: Scratch

Answer



Task 2: Investigate - question 2

Question

Explain what the following block of code does:



```
if health = yes then  
  say Good, glad to hear it for 2 seconds
```

Source: Scratch

Answer



Task 2: Investigate - question 3

Question

What happens if you say
“No” when asked “Are you
OK?”

Answer



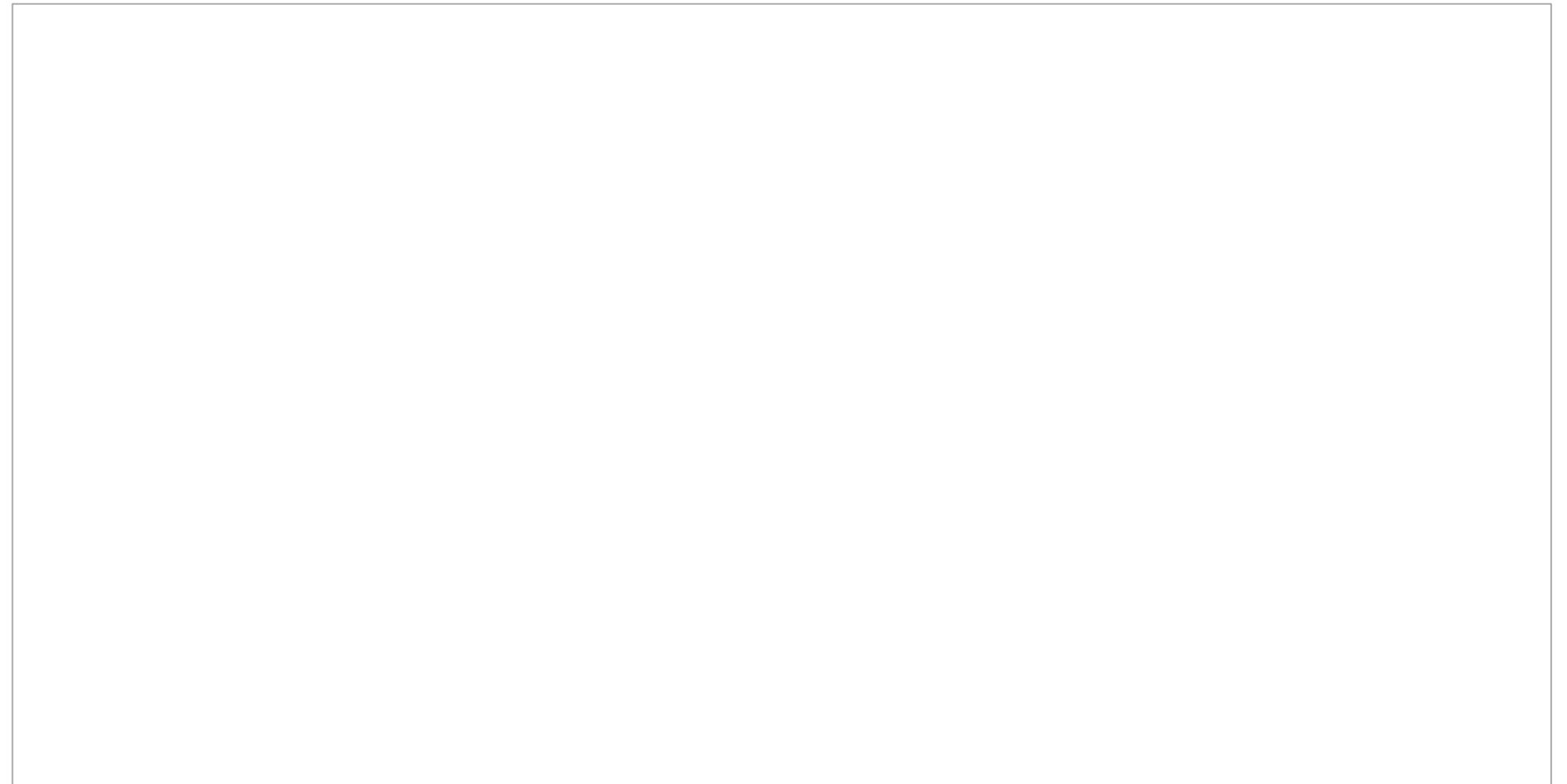
Task 2: Investigate - question 4

Question

What happens if you say “No” when asked if it is your birthday?

What happens if you say “Yes” when asked if it’s your birthday?

Answer



Task 2: Investigate - question 5

Question

What is the difference between the following two blocks of code:

Block 1

```
if weather = warm then
  say Enjoy the nice weather for 2 seconds
  say Have a nice day for 2 seconds
```

Block 2

```
if weather = warm then
  say Enjoy the nice weather for 2 seconds
else
  say Put your coat on for 2 seconds
  say Have a nice day for 2 seconds
```

Source: Scratch

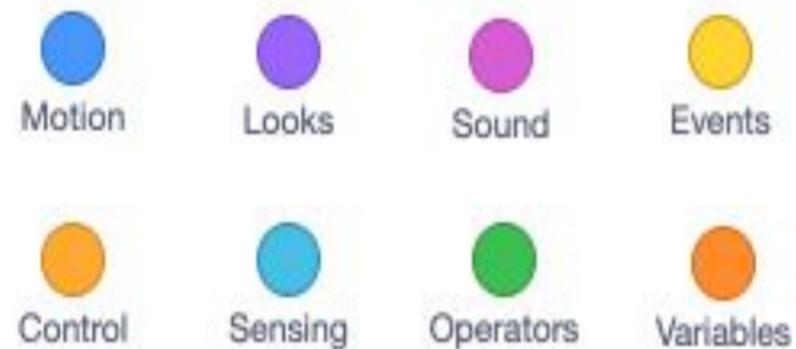
Answer



Task 2: Investigate - question 6

Question

From which menu on the left-hand side of the screen would you find the **If** blocks?



Source: Scratch

Answer

A large, empty rectangular box intended for the user to provide their answer to the question.



Task 2: Investigate - question 7

Question

From which menu on the left-hand side of the screen would you find the following blocks?



Source: Scratch

Answer

Empty box for the answer.



Task 3 - part 1

The Big Ed 'Easter egg'

An Easter egg in a computer program is extra (hidden) functionality.

Add an Easter egg to the 'ask_name' subroutine that responds with the following, only if the user says their name is "Ed".



Source: Scratch



Task 3 - part 2

What if I'm not OK?

Change the 'how_are_you' subroutine so that if the user says "no" to the question "Are you OK?" then it responds with the following:



Source: Scratch

Note: Your program should still say "Good, glad to hear it", if the user says "Yes".



Task 3 - part 3

The Big Ed 'Easter egg' part 2

Modify the code that you have just added so that it will say the same message if the user says their name is either "Ed" or "Big Ed".

Take a screenshot of your program and paste below



Task 4 - Parson's Problem

I want a program that asks a single quiz question “What is the capital city of Spain?”

If the user gets the answer correct (Madrid), then it should add 1 to the score and say “That is correct”.

If the user doesn't answer correctly, the program should say “Incorrect”.

Your challenge is to rearrange the blocks to form a working program.

<https://oaknat.uk/3gjMFBz>

