

Student workbook

# EduBlocks make a quiz

Code Playground



# EduBlocks make a quiz

## EduBlocks project

EduBlocks is a free tool that helps anyone learn how to code with text-based languages like Python, using familiar block coding as used in Scratch.

In this project, we are going to code a multiple choice quiz! The computer will ask a number of questions and tell you whether the answer you have chosen is correct.

You will be able to see what block coding looks like in Python coding language. .

This project is designed for EduBlocks 4.0.

**Hope you enjoy the project!**

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```
'Welcome to our coding quiz!'
```

```
Question 1: What is Scratch?
```

```
1: A block based coding language
```

```
2: A text based coding language
```

```
3: A small cut
```

```
4: Something you do when itchy
```

```
Choose option 1, 2, 3 or 4: █
```

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## Step 1

To build our quiz, we need to code together a number of different factors, using statements, loops and logic blocks.

To start, we are going to use statements to allow us to welcome the player to our quiz, and then set up the first question and possible answers.

If you run the code now, you will see your welcome and the question and possible answers printed for question 1.

In the next step, we will code the answer to the question and tell the player whether they have chosen the correct or wrong answer.

## Python code

```
1 # Start Code Here
2 print("Welcome to our coding quiz!")
3 print("Question 1: What is Scratch?")
4 print("1: A block based coding language")
5 print("2: A text based coding language")
6 print("3: A small cut")
7 print("4: Something you do when itchy")
```

## Block code



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## Step 2

The next step is to code the answer to the question and tell the player whether they have chosen the correct or wrong answer. All the code is written in a while true loop, so if the player answers incorrectly they are given another chance to answer.

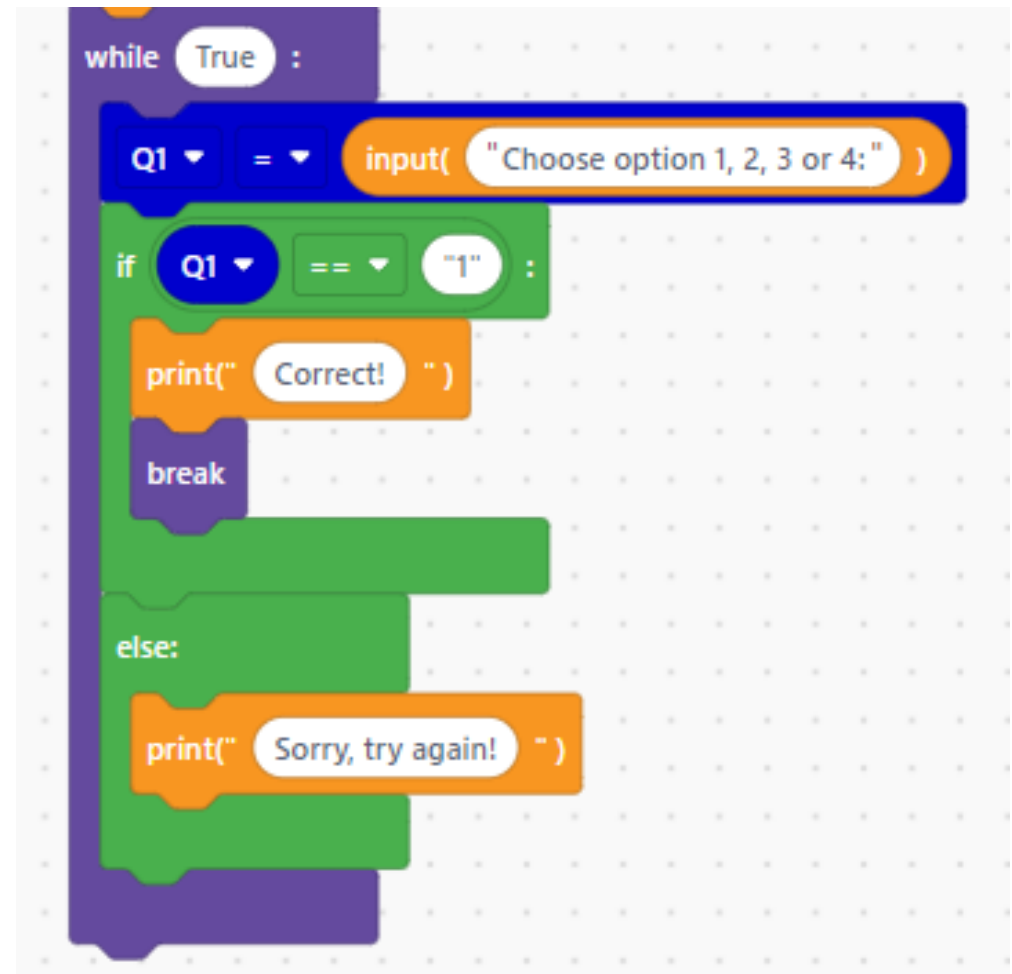
The Q1 variable allows the player to input their answer and the if logic block determines if they are correct – in this case the correct answer is choice 1. If the player has chosen option 1, then correct is printed and the code breaks, ready for the next question.

The else block allows for the player to enter a different choice if they have got the question incorrect, and is it in the loop, will continue to ask until the player selects the correct answer.

## Python code

```
8 while True:
9     Q1 = input("Choose option 1, 2, 3 or 4:")
10    if Q1 == "1":
11        print("Correct!")
12        break
13    else:
14        print("Sorry, try again!")
```

## Block code



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## Step 3

Now we have coded the first question, answers and outcomes, we need to replicate the code from question 1 for the remaining 4 questions. Next, is question 2.

## Python code

```
15 print("Question 2: What is Python?")
16 print("1: A type of snake")
17 print("2: A block based coding language")
18 print("3: A text based coding language")
19 print("4: A computer's Central Processing Unit ")
20 while True:
21     Q2 = input("Choose 1, 2, 3 or 4:")
22     if Q2 == "3":
23         print("Correct!")
24         break
25     else:
26         print("Sorry, try again!")
```

## Block code

```
print(" Question 2: What is Python? ")
print(" 1: A type of snake ")
print(" 2: A block based coding language ")
print(" 3: A text based coding language ")
print(" 4: A computer's Central Processing Unit ")
while True :
    Q2 = input( "Choose 1, 2, 3 or 4:" )
    if Q2 == "3" :
        print(" Correct! ")
        break
    else:
        print(" Sorry, try again! ")
```

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## Step 4

Next, is question 3.

### Python code

```
27 print("Question 3: What year was Python released?")
28 print("1: 1981")
29 print("2: 1991")
30 print("3: 2001")
31 print("4: 2011")
32 while True:
33     Q3 = input("Choose 1, 2, 3 or 4:")
34     if Q3 == "2":
35         print("Correct!")
36         break
37     else:
38         print("Sorry, try again!")
```

### Block code

The block code is written in a Scratch-style visual programming language. It consists of the following blocks:

- Five orange `print` blocks, each containing a question and a choice: `print(" Question 3: What year was Python released? ")`, `print(" 1: 1981 ")`, `print(" 2: 1991 ")`, `print(" 3: 2001 ")`, and `print(" 4: 2011 ")`.
- A purple `while` loop block with the condition `True`.
- Inside the `while` loop:
  - A blue `input` block with the text `"Choose 1, 2, 3 or 4:"` and a variable `Q3` to store the input.
  - A green `if` block with the condition `Q3 == "2"`.
    - Inside the `if` block: an orange `print` block with `" Correct! "` and a purple `break` block.
  - A green `else` block with an orange `print` block containing `" Sorry, try again! "`.

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## Step 5

Next, is question 4.

### Python code

```
39 print("Question 4: Which TV show is Python named after?")
40 print("1: Planet Earth")
41 print("2: Stranger Things")
42 print("3: Cobra Kai")
43 print("4: Monty Python's Flying Circus")
44 while True:
45     Q4 = input("Choose 1, 2, 3 or 4:")
46     if Q4 == "4":
47         print("Correct!")
48         break
49     else:
50         print("Sorry, try again!")
```

### Block code

```
print(" Question 4: Which TV show is Python named after? ")
print(" 1: Planet Earth ")
print(" 2: Stranger Things ")
print(" 3: Cobra Kai ")
print(" 4: Monty Python's Flying Circus ")
while True :
    Q4 = input( "Choose 1, 2, 3 or 4:" )
    if Q4 == "4" :
        print(" Correct! ")
        break
    else:
        print(" Sorry, try again! ")
```

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## Step 6

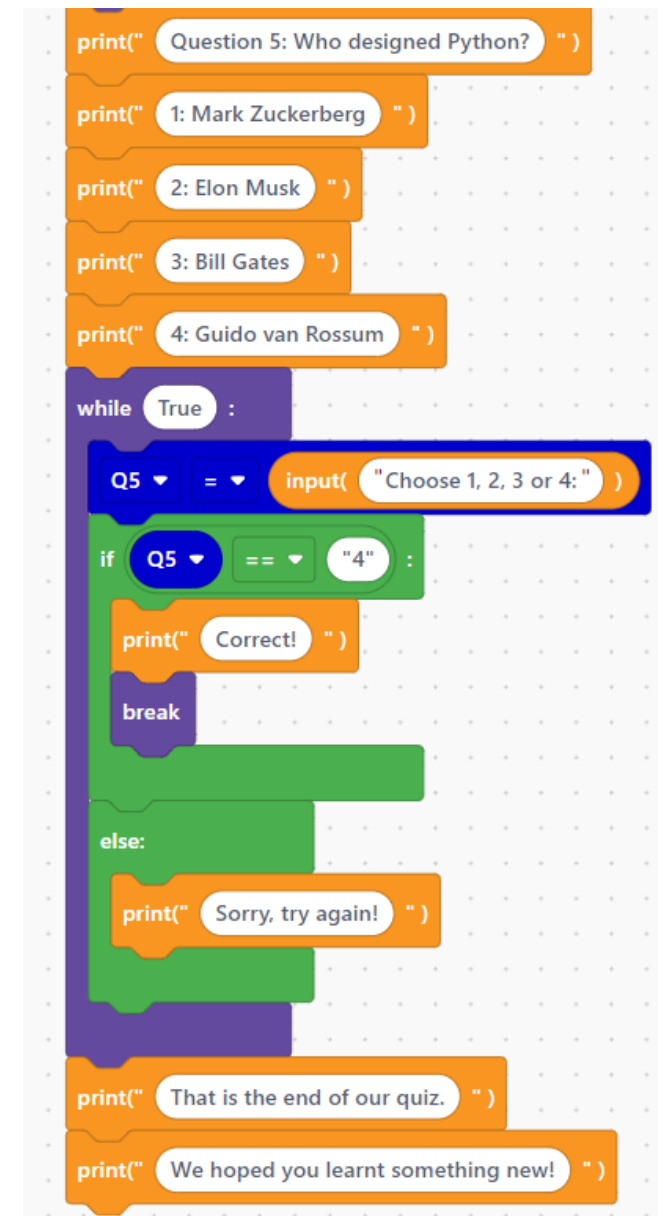
Next, is question 5.

After coding this question and answer possibilities, we have added additional blocks outside of the loop. This will ensure the game stops after the 5<sup>th</sup> question. To add more questions of your own, continue building code inside the loop.

## Python code

```
51 print("Question 5: Who designed Python?")
52 print("1: Mark Zuckerberg")
53 print("2: Elon Musk")
54 print("3: Bill Gates")
55 print("4: Guido van Rossum")
56 while True:
57     Q5 = input("Choose 1, 2, 3 or 4:")
58     if Q5 == "4":
59         print("Correct!")
60         break
61     else:
62         print("Sorry, try again!")
63 print("That is the end of our quiz.")
64 print("We hoped you learnt something new!")
```

## Block code






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## Step 6

That's it! You have coded the complete Quiz!  
Now run your code to check that it works.

```
Powered by  trinket
'Welcome to our coding quiz!'
Question 1: What is Scratch?
1: A block based coding language
2: A text based coding language
3: A small cut
4: Something you do when itchy
Choose option 1, 2, 3 or 4: 3
Sorry, try again!
Choose option 1, 2, 3 or 4: 1
Correct!
Question 2: What is Python?
1: A type of snake
2: A block based coding language
3: A text based coding language
4: A computer's Central Processing Unit
Choose 1, 2, 3 or 4: 2
Sorry, try again!
Choose 1, 2, 3 or 4: 3
Correct!
Question 3: What year was Python released?
1: 1981
2: 1991
3: 2001
4: 2011
Choose 1, 2, 3 or 4: 2
Correct!
Question 4: Which TV show is Python named after?
1: Planet Earth
2: Stranger Things
3: Cobra Kai
4: Monty Python's Flying Circus
Choose 1, 2, 3 or 4: 4
Correct!
Question 5: Who designed Python?
1: Mark Zuckerberg
2: Elon Musk
3: Bill Gates
4: Guido van Rossum
Choose 1, 2, 3 or 4: 4
Correct!
That is the end of our quiz.
We hoped you learnt something new!
```

# Notes

## Code Playground

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