



F1.7 Input from the user

Programming basics · GCSE · OCR J277 2.2.1, AQA 8525 3.2.7, Edexcel
1CP2 6.4.1 · about 12 min

What this lesson is about

Asking questions with `input()`, and why every answer is text.

- Asking a question
- The robot waits too
- Asking more than once
- Joining text to an answer
- Answers are always text
- Tasks that answer for you

Questions

5 marks in all

1. What does the program do when it reaches `name = input("Name? ")`? [1 mark]

- ☐ A Shows the prompt and waits for the user to type and press Enter
- ☐ B Carries on and fills in name later
- ☐ C Prints the value of name
- ☐ D Asks the robot for its name

Answer: A. input stops the program, and the robot, until an answer is typed. The answer is stored in name.

2. The user types 20 at `far = input("How far? ")`. What is stored in far? [1 mark]

- ☐ A The string "20"
- ☐ B The integer 20
- ☐ C The real number 20.0
- ☐ D Nothing until it is printed

Answer: A. input always gives back text, even when the text looks like a number.

3. What does this program print? [1 mark]

```
far = "20"  
print(far * 3)
```

Answer:

202020

far holds text, and multiplying text repeats it. This is what happens when an input answer is used without converting it.

4. Why leave a space at the end of the prompt, as in `input("Name? ")`?

[1 mark]

- ☐ A So the answer is not squashed against the question
- ☐ B Python needs it to work
- ☐ C It makes the answer a string
- ☐ D It stops the robot

Answer: A. What the user types appears straight after the prompt, so the space keeps them apart.

5. Which of these are inputs to a program?

[1 mark]

Tick every answer that is true.

- ☐ A A name typed at the keyboard
- ☐ B A distance reading from a sensor
- ☐ C Text printed to the screen
- ☐ D A note played on the buzzer

Answer: A, B. Inputs go into a program: the keyboard and sensors. Printing and playing a note are outputs.

The task: greet by name

Ask `What is your name?`, then print `Hello <name>, I am BugBot` using the answer, and turn the LED green. The task will answer `Ada`, but your program must work for any name, so do not type `Ada` into it.

```
# the two lines every program starts with: the commands, then the robot
from bugbot import *
connect()

name = ...
```

The hint students can ask for: Ask for the name and keep it in a variable, then use that variable in what you print. Change the LED after the greeting.

A solution

```
from bugbot import *
connect()
name = input("What is your name? ")
print("Hello " + name + ", I am BugBot")
led("green")
```

Any program that meets the task's checks is marked correct in the simulator; this is one way, not the only way.