COMPUTING AND DIGITAL LITERACY

Flowcharts

Difficulty level: Easy

Computing and Digital Literacy

This document was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

Overview of the concept

This is how you draw a plan as boxes and arrows so anyone can follow it. The steps for making a recipe or fixing a bike are clearer as a picture than as a paragraph, especially when there are choices along the way. A flowchart shows the order, the decisions, and what happens next at each step. It is how teams plan a job so everyone follows the same steps.

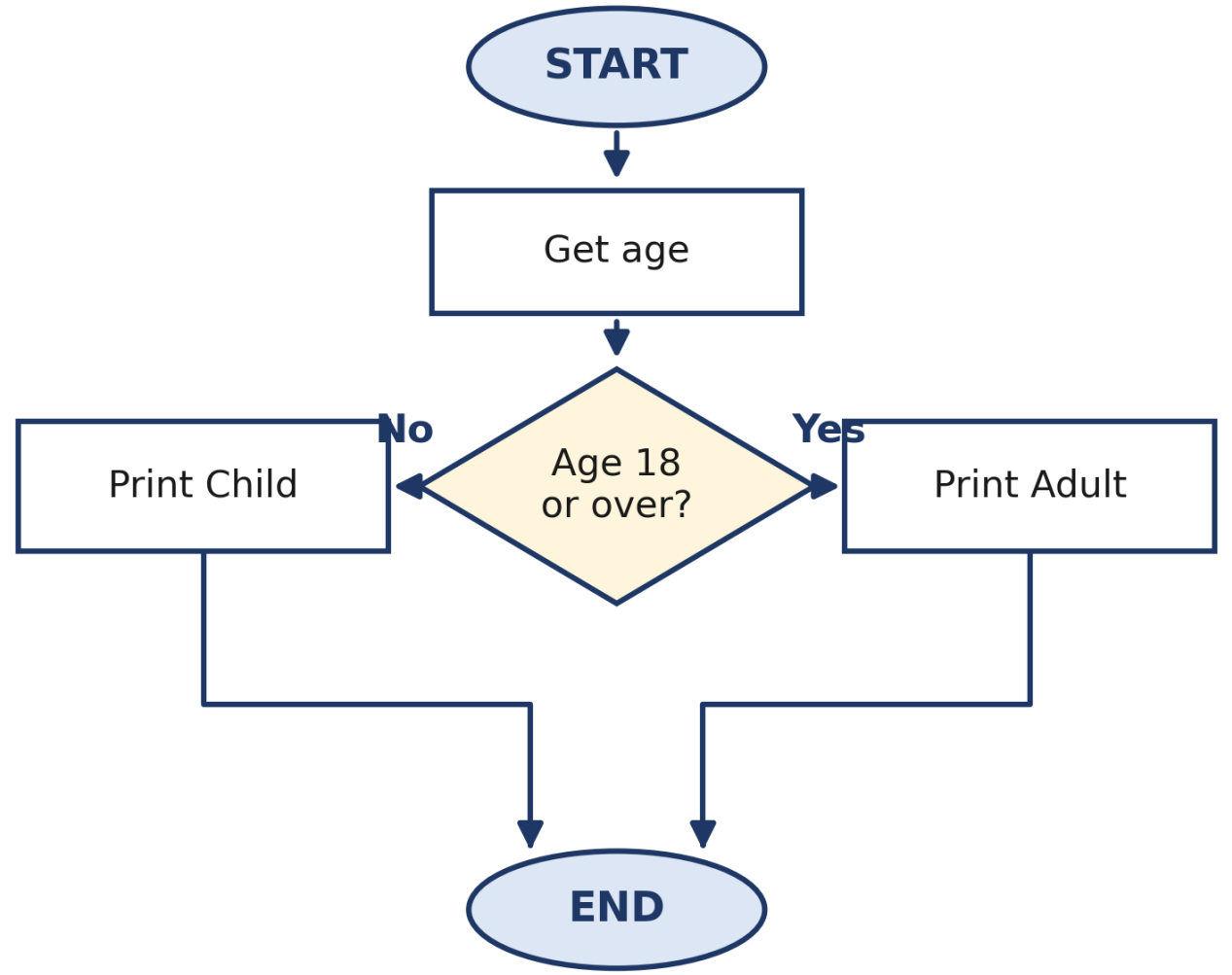


© 2026 Brett Robbins. All Rights Reserved.

Worked examples

EXAMPLE 1

Q Follow the flowchart to find what is printed when the age is 20.



SOLUTION

This is a trace-the-flowchart question. The one rule to remember is to follow the arrows and answer every diamond honestly, because the diamond decides which path you take.

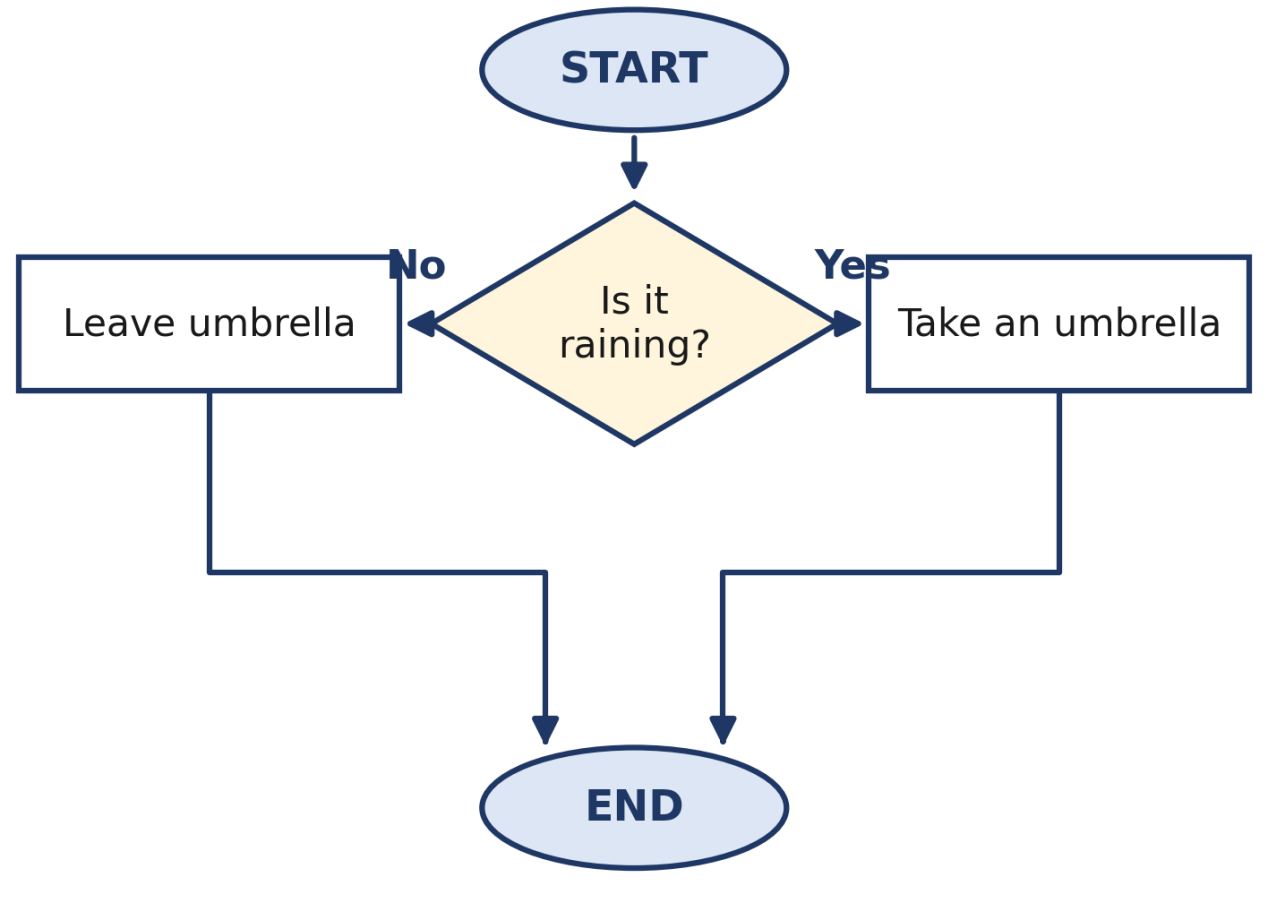
START, then Get age: the age is 20. The diamond asks: is the age 18 or over? Yes.

Follow the Yes arrow to Print 'Adult', then END.

© 2026 Brett Robbins. All Rights Reserved.

EXAMPLE 2

Q Follow the flowchart to find what to do on a rainy morning.



SOLUTION

START, then Look outside: it is raining. The diamond asks: is it raining? Yes.

Follow the Yes arrow to Take an umbrella, then END.

On a dry morning the same flowchart takes the No arrow to Go straight out. The diamond is the only step that splits into two paths.

© 2026 Brett Robbins. All Rights Reserved.

Practice questions

1 A flowchart asks your age, then asks: is the age 18 or over? If yes, print 'Adult'. If no, print 'Child'. What is printed when the age is 18?

A Adult

B Child

Understand It with Pulse | Flag a mistake

2 In the same age flowchart, what is printed when the age is 12?

A Adult

B Child

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

3 A flowchart reads a test score. If it is 50 or over, print 'Pass'. If it is below 50, print 'Fail'. What is printed for a score of 62?

A Pass

B Fail

Understand It with Pulse | Flag a mistake

4 In the same test flowchart, what is printed for a score of 40?

A Pass

B Fail

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

5

A flowchart says: look outside; if it is raining, take an umbrella; if it is not, go straight out. What do you do when it is not raining?

- A Go straight out
- B Take an umbrella
- C Stay inside until it stops raining
- D Wait for it to start raining

Understand It with Pulse | Flag a mistake

6

A flowchart asks: is the number divisible by 2? If yes, print 'Even'. If no, print 'Odd'. What is printed for the number 7?

- A Even
- B Odd

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

7 A flowchart reads numbers and adds them until the user enters -1, then prints the total. What does -1 do here?

- **A** It is added to the total like every other number
- **B** It is the stopping value: it ends the reading and is not added
- **C** It starts the reading over from the beginning
- **D** It prints the total twice

Understand It with Pulse | Flag a mistake

8 Which shape does a flowchart use for START and END?

- **A** A rectangle
- **B** A diamond
- **C** An oval (rounded shape)
- **D** A parallelogram

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

9

Maya draws a flowchart with a diamond that has only one arrow leaving it. What is wrong?

A. The diamond should have three exits, Yes, No, and Maybe

B. Nothing is wrong: one arrow leaving a decision is enough

C. A decision needs two exits, Yes and No, or the No path has nowhere to go

D. The diamond should be a rectangle instead

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

10 **Describe a flowchart that reads a test score from 0 to 100 and prints 'Pass' if it is 50 or above, 'Fail' if it is below. What are its steps in order?**

A START, read the score, 50 or over?, Yes Print Pass, No Print Fail, END

B START, read the score, Print Pass, Print Fail, END

C START, 50 or over?, read the score, Yes Print Fail, No Print Pass, END

D START, read the score, 50 or over?, Yes Print Fail, No Print Pass, END

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

ANSWER KEY

1. Adult

2. Child

3. Pass

4. Fail

5. Go straight out

6. Odd

7. It is the stopping value: it ends the reading and is not added

8. An oval (rounded shape)

9. A decision needs two exits, Yes and No, or the No path has nowhere to go

10. START, read the score, 50 or over?, Yes Print Pass, No Print Fail, END

© 2026 Brett Robbins. All Rights Reserved.