

# Problem - Task

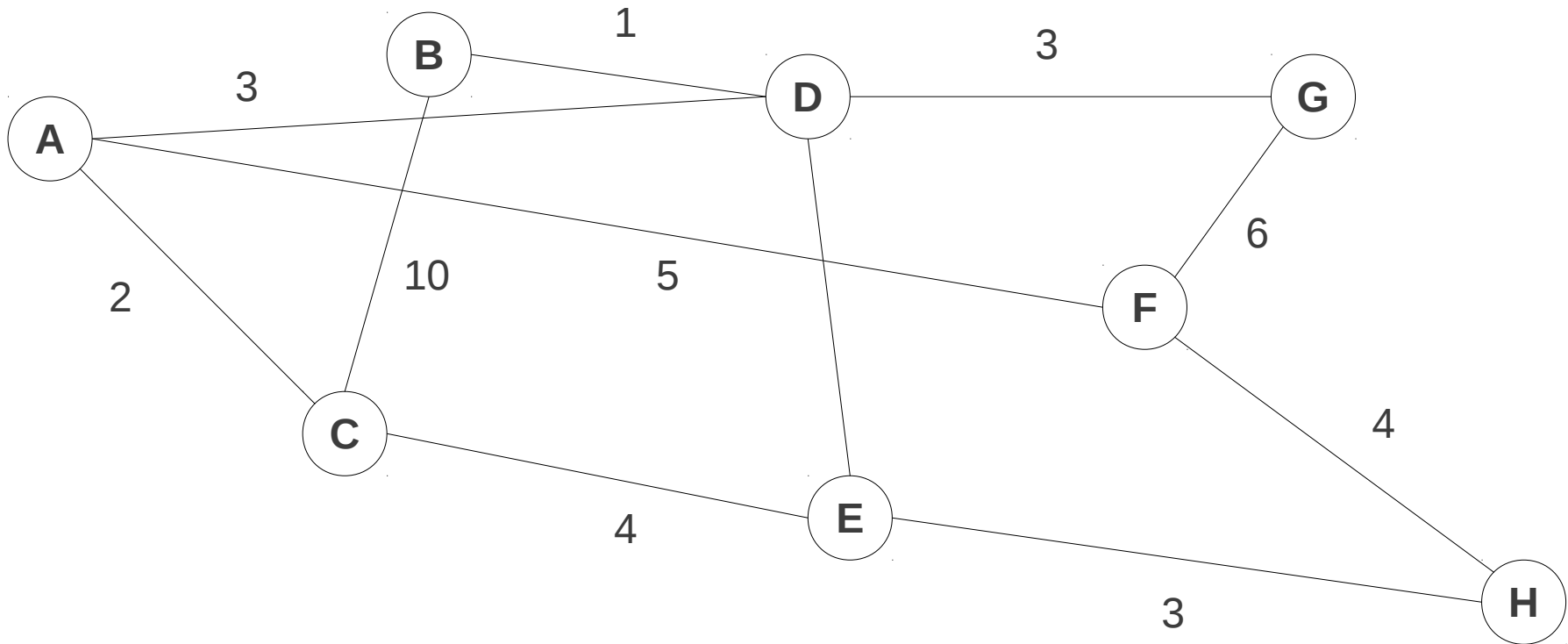
$$4 + (10 * 5) = ?$$

Organize the following list of natural numbers in ascending order: 31, 4, 1, 12, 10, 52, 33, 48, 1, 7

Write down: "Hello World!"

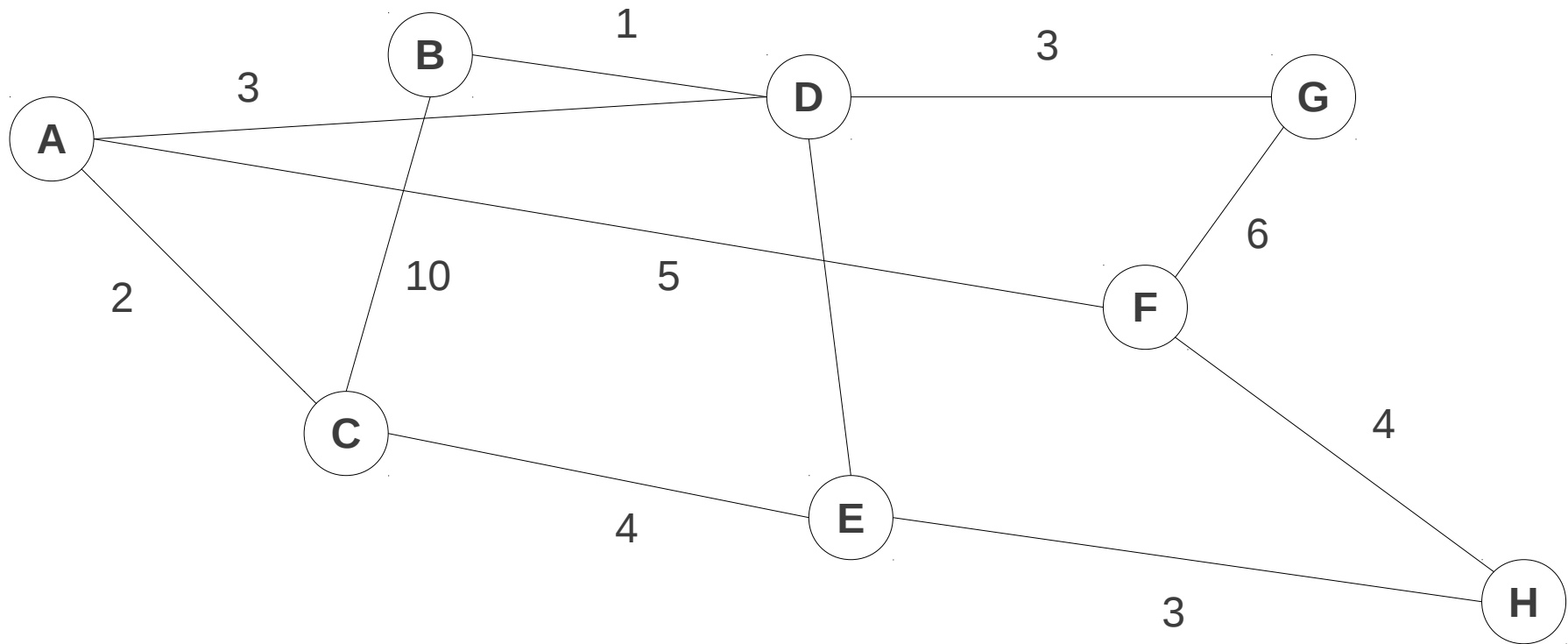
# Problem - Task

Find the shortest path from A to G, from B to F and from C to G:



# Problem 4 – reformulation/solution

Find the shortest path from A to G, from B to F and from C to G:



Define the procedure (DfS, BfS)

# Problem 1 – reformulation/solution

$$4 + (10 * 5) = ?$$

Means:

a) number 1

b)  $\text{succ}(x) = x + 1$  (successor function)

c)  $\text{add}(x, y) = x + y$  (addition function)

d)  $\text{mul}(x, y) = x * y$  (multiplication function)

# Problem 2 – reformulation/solution

Organize the following list of natural numbers in ascending order: 31, 4, 1, 12, 10, 52, 33, 48, 1, 7

Means:

a) Array[\_, \_, \_, \_, \_, \_, \_, \_, \_, \_]

b)  $\text{comp}(x, y) = x$  (if  $x < y$ ) OR  $y$  (if  $x > y$ )

# Problem 3 – reformulation/solution

Write down: “Hello World!”

Means I:

JAVA programming language

Means II:

ASCII

# Important Concepts

Problem, task - solution

Algorithm

Computer program

- Source code
- Binary code