Examples for Algorithm Flowcharts

Algorithms and flowcharts are two different ways of presenting the process of solving a problem. Algorithms consist of a set of steps for solving a particular problem, while in flowcharts, those steps are usually displayed in shapes and process boxes with arrows. So flowcharts can be used for presenting algorithms. This page will introduce some examples of algorithm flowcharts.

Flowcharts are diagrams that visually present the process of solving problems. They are drawn according to steps described in the algorithms. On this page you will find some flowchart examples explaining the algorithms.

Rules of Drawing Flowcharts for Algorithms

There are some basic shapes and boxes included in flowcharts that are used in the structure of explaining steps of algorithms. Knowing how to use them while drawing flowcharts is crucial. Here are some rules that should be known:

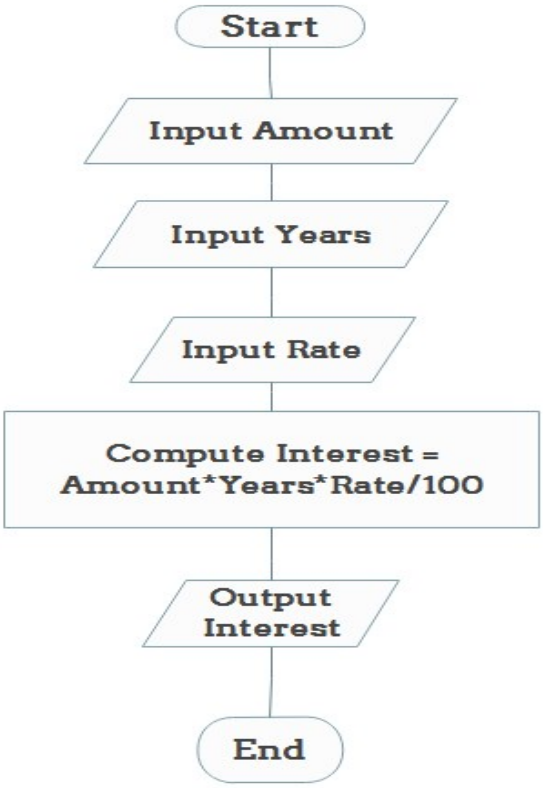
1. All boxes of flowcharts are connected with arrows to show the logical connection between them,
2. Flowcharts will flow from top to bottom,
3. All flowcharts start with a Start Box and end with a Terminal Box,

Examples of Flowcharts for Algorithms

These examples will help you get a better understanding of flowchart techniques. **Example 1: Calculate the Interest of a Bank Deposit Algorithm:**

- Step 1: Read amount,
- Step 2: Read years,
- Step 3: Read rate,
- Step 4: Calculate the interest with formula "Interest=Amount*Years*Rate/100
- Step 5: Print interest,

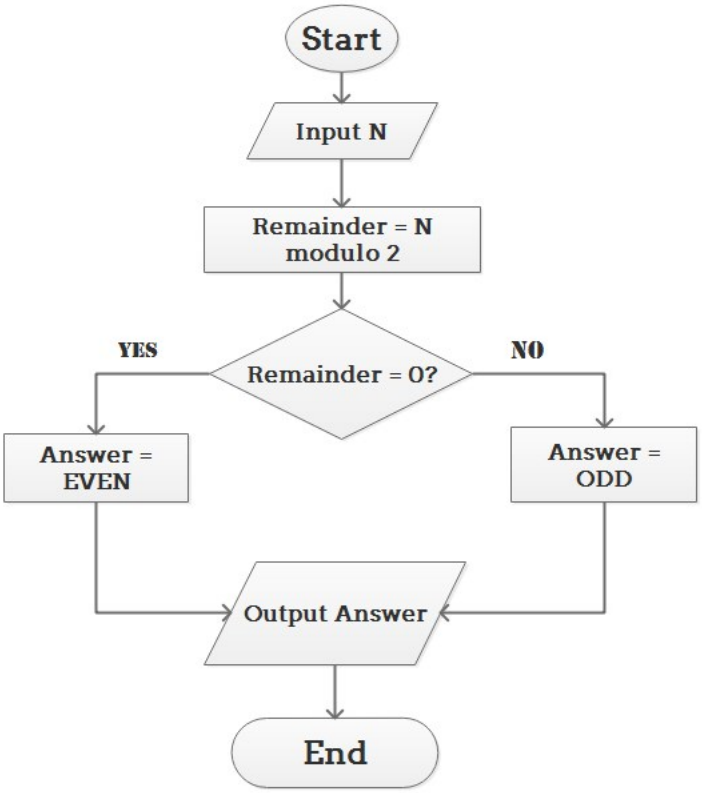
Flowchart:



Example 2: Determine and Output Whether Number N is Even or Odd Algorithm:

- Step 1: Read number N,
- Step 2: Set remainder as N modulo 2,
- Step 3: If remainder is equal to 0 then number N is even, else number N is odd, Step 4: Print output.

Flowchart:

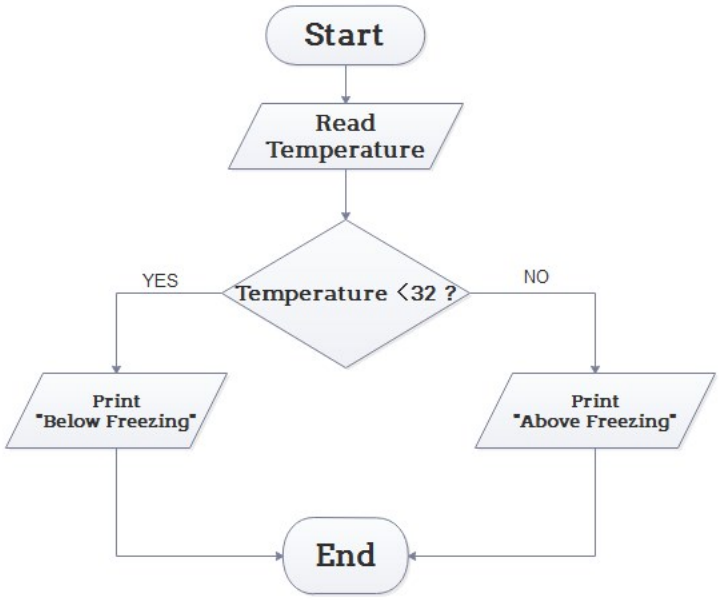


Example 3: Determine Whether a Temperature is Below or Above the Freezing Point Algorithm:

- Step 1: Input temperature,

Step 2: If it is less than 32, then print "below freezing point", otherwise print "above freezing point"

Flowchart:



Example 4: Determine Whether A Student Passed the Exam or Not:

Algorithm:

- Step 1: Input grades of 4 courses M1, M2, M3 and M4,
- Step 2: Calculate the average grade

with formula

"Grade=(M1+M2+M3+M4)/4" Step 3:

If the average grade is less than 60,

print "FAIL", else print "PASS".

Flowchart: