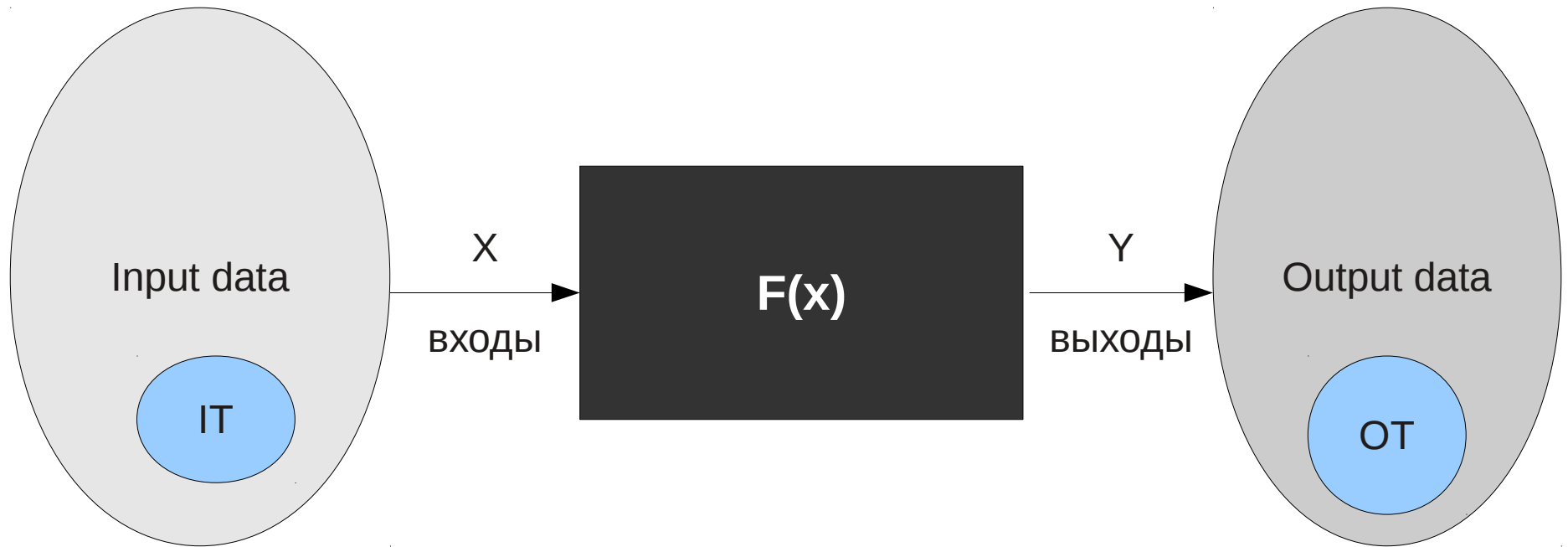


Functional testing

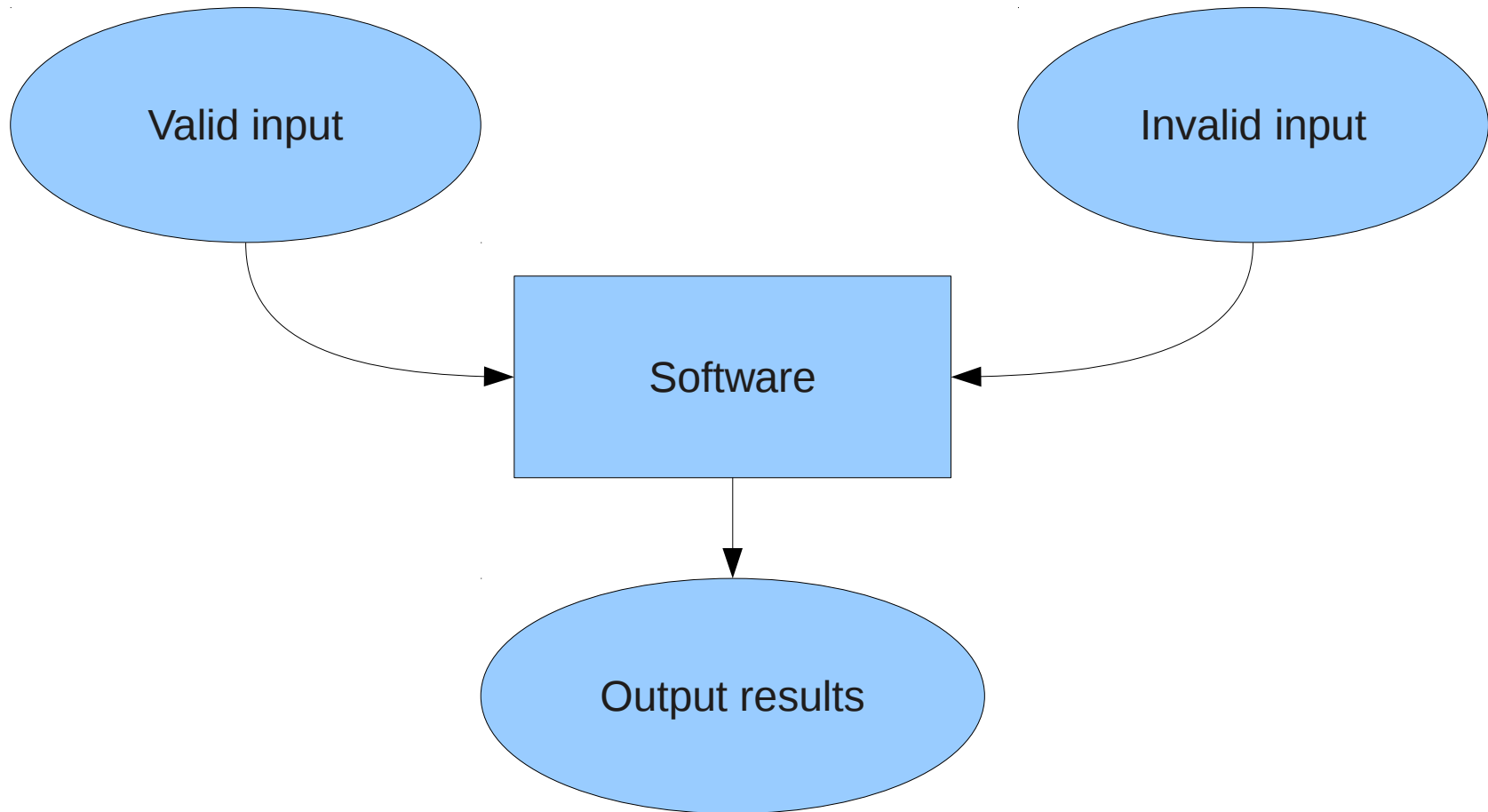


Black box testing

This type of testing helps to find such bugs:

1. Invalid or absent functions;
2. Interface errors;
3. Errors in external structures or in access to external DB;
4. Errors of system characteristics;
5. Errors of initialization and stopping.

Equivalence partitioning



Equivalence partitioning

Equivalence class — data set with equal properties. Software must use the same way to process every element of such data set.

One test for one class.

Equivalence partitioning

1. Диапазон $n \dots m \rightarrow 1$ допустимый, 2 недопустимых
2. Значение $a \rightarrow 1$ допустимый, 2 недопустимых
3. Множество значений $\{a,b,c\} \rightarrow 1$ допустимый, 1 недопустимый
4. Булево значение $\rightarrow 1$ допустимый, 1 недопустимый

Boundary testing

Difference from equivalence:

1. Values on the minimum and maximum edges of an equivalence partition are tested;
2. The values could be either input or output ranges of a software component.

State transition table

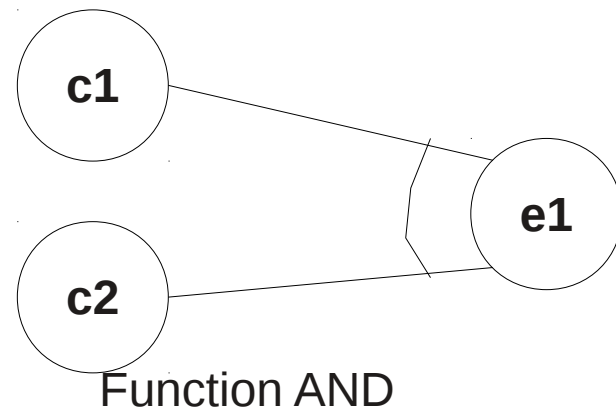
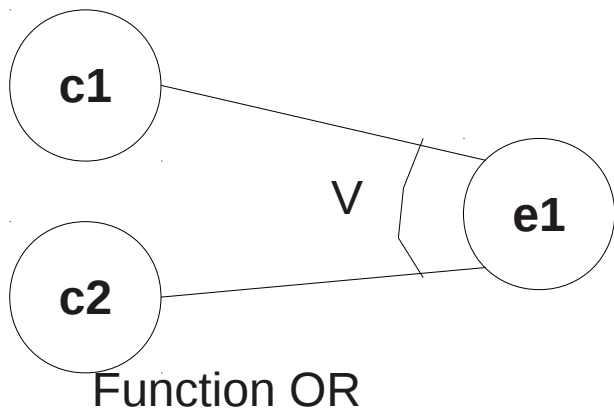
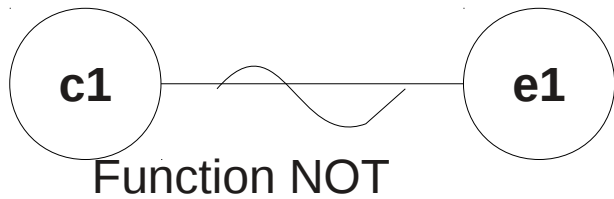
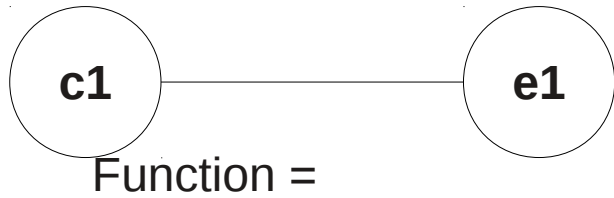
URL:

http://en.wikipedia.org/wiki/State_transition_table

Steps of testing:

1. For each module lists the cause (input conditions or equivalence classes) and effect (action or output conditions). Cause and effect of each is assigned an identifier;
2. Developed a graph of cause-effect relationships;
3. Count is converted to a decision table;
4. The table columns are converted into solutions test cases

State transition table



State transition table

