Students have either already taken or started taking this quiz, so be careful about editing it. If you change any quiz questions in a significant way, you may want to consider regrading students who took the old version of the quiz.

Points 15 Published

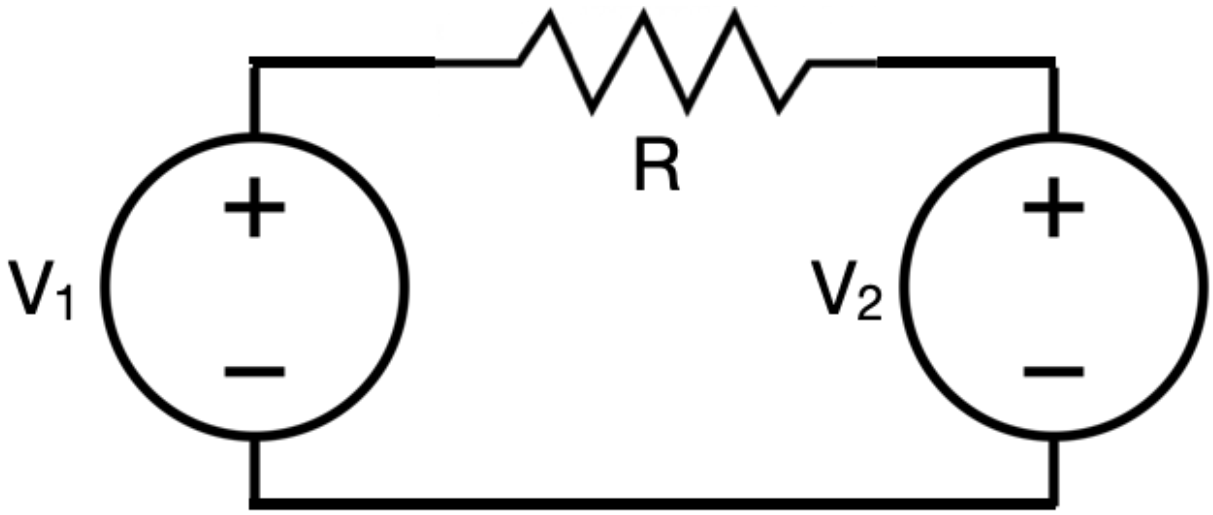
Details Questions

Show Question Details

Question 1 Pick 1 questions, 4.5 pts per question

Question

Given the following circuit,



with R=1Ω, V1 = 1V, V2 = 2V.

1) The absolute value of current through the resistor is [current] Amps.

2) The power [RDG] in R is [PR] Watts.

3) The power [V1DG] in V1 is [PV1] Watts.

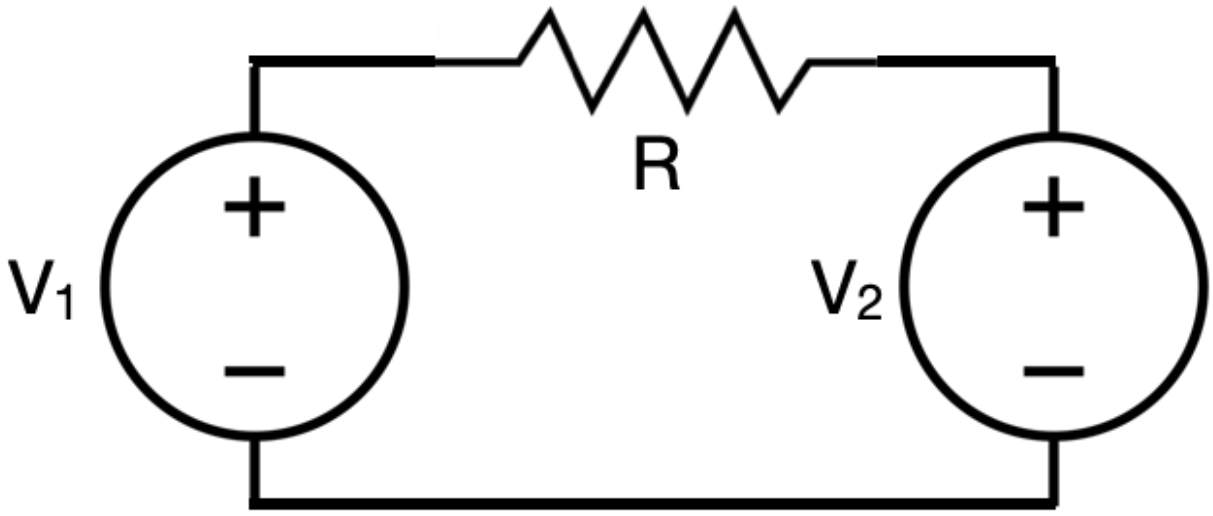
4) The power [V2DG] in V2 is [PV2] Watts.

Show Answers for current

ct Answer 1

Question

Given the following circuit,



with R=1Ω, V1 = 2V, V2 = 1V.

1) The absolute value of current through the resistor is [current] Amps.

2) The power [RDG] in R is [PR] Watts.

3) The power [V1DG] in V1 is [PV1] Watts.

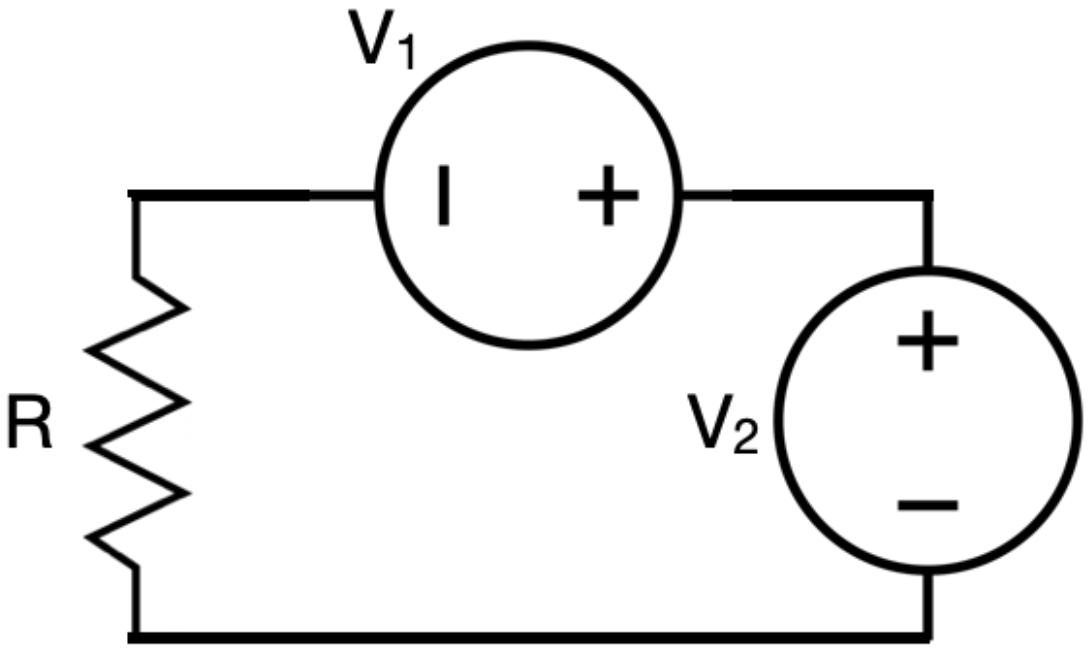
4) The power [V2DG] in V2 is [PV2] Watts.

Show Answers for current

ct Answer 1

Question

Given the following circuit,



with R=1Ω, V1 = 2V, V2 = 1V.

1) The absolute value of current through the resistor is [current] Amps.

2) The power [RDG] in R is [PR] Watts.

3) The power [V1DG] in V1 is [PV1] Watts.

4) The power [V2DG] in V2 is [PV2] Watts.

Show Answers for current

ct Answer 1

Question

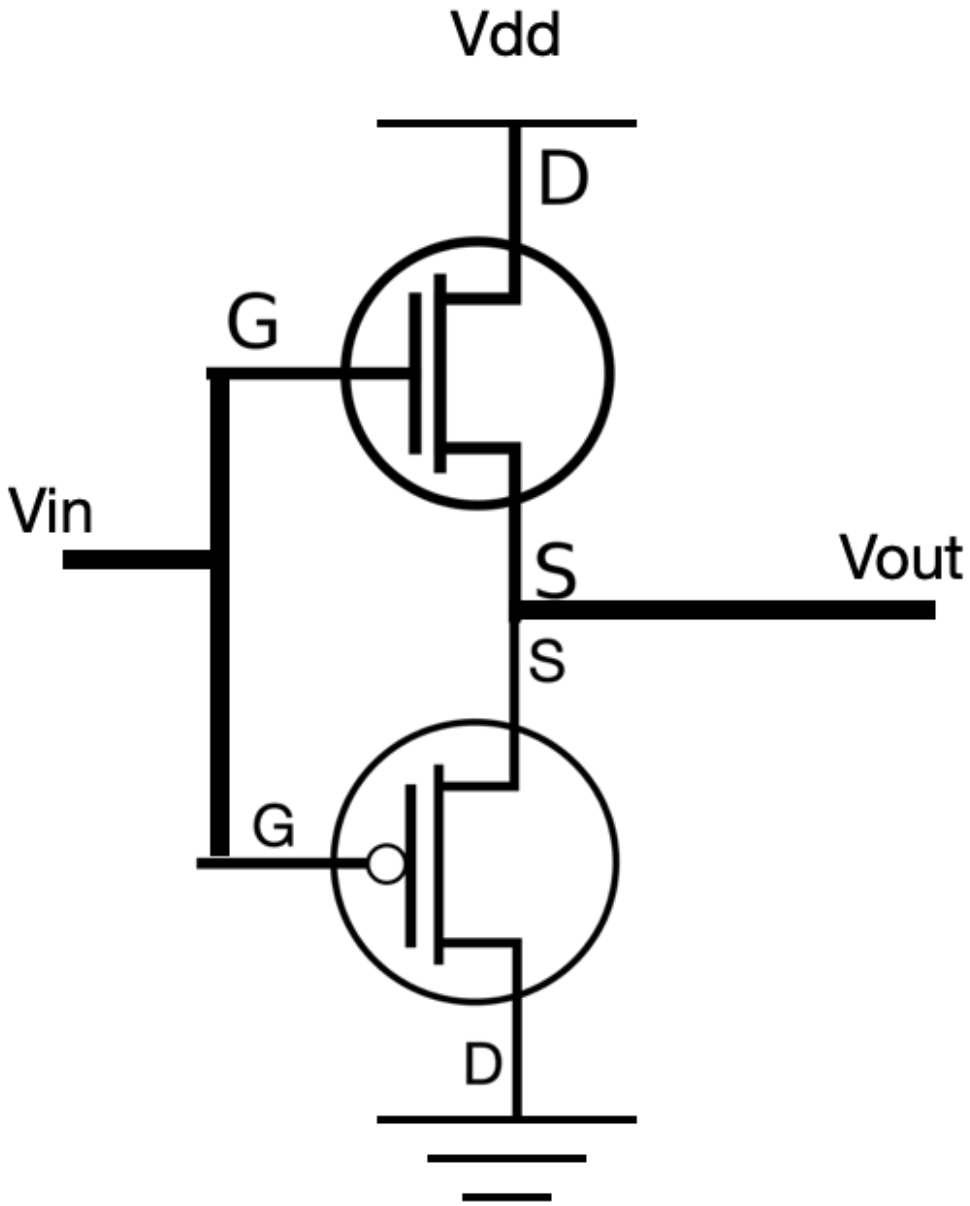
An inverter in this question is a device for which Vin=0V will result in Vout = Vdd, and for Vin = Vdd will result in Vout = 0V

For each of the following circuits, determine if the circuit is an inverter or not.

Pick 2 questions, 1.5 pts per question

Question

Is following circuit an inverter?

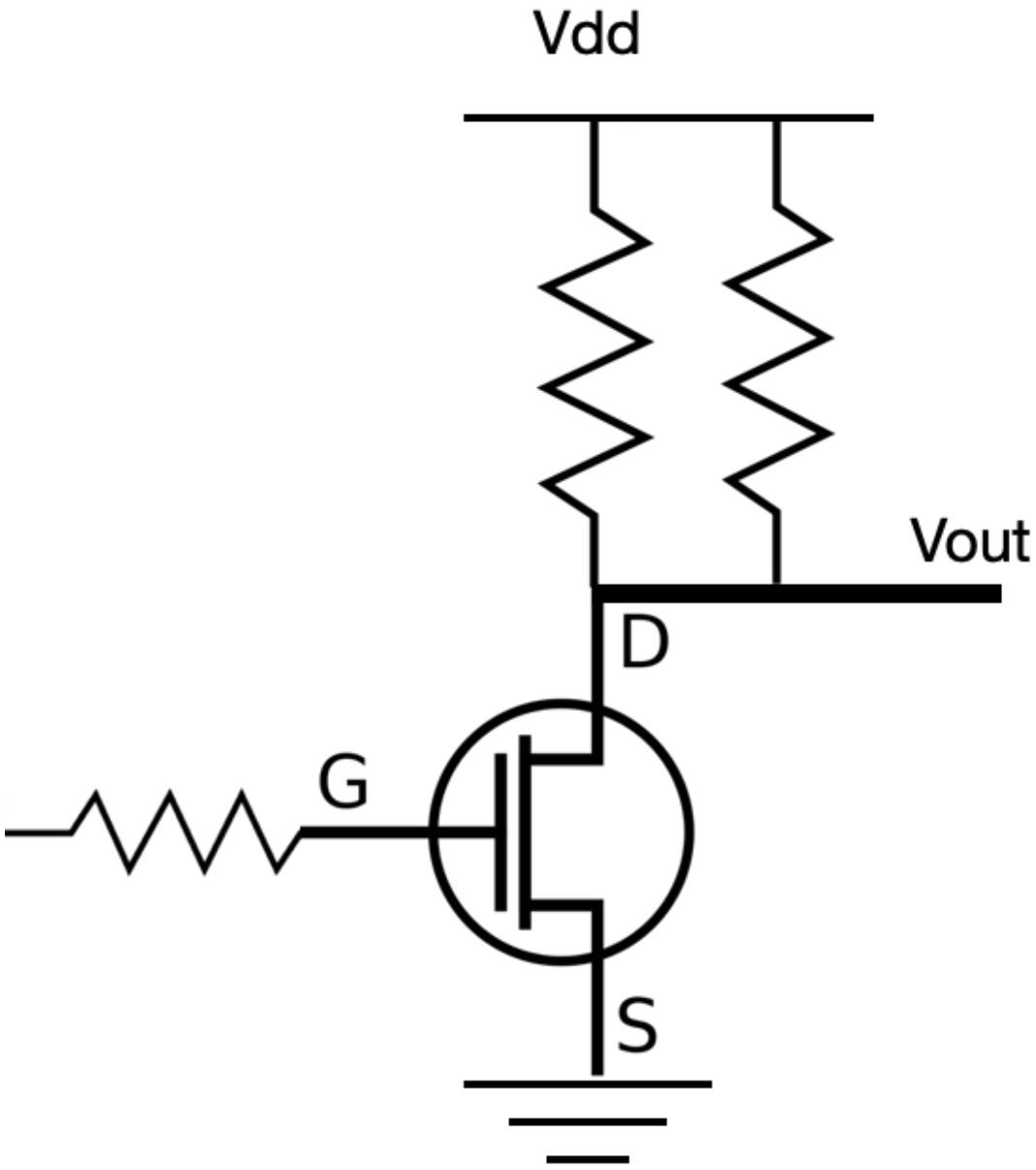


- Yes
- No

ct Answer

Question

Is following circuit an inverter?

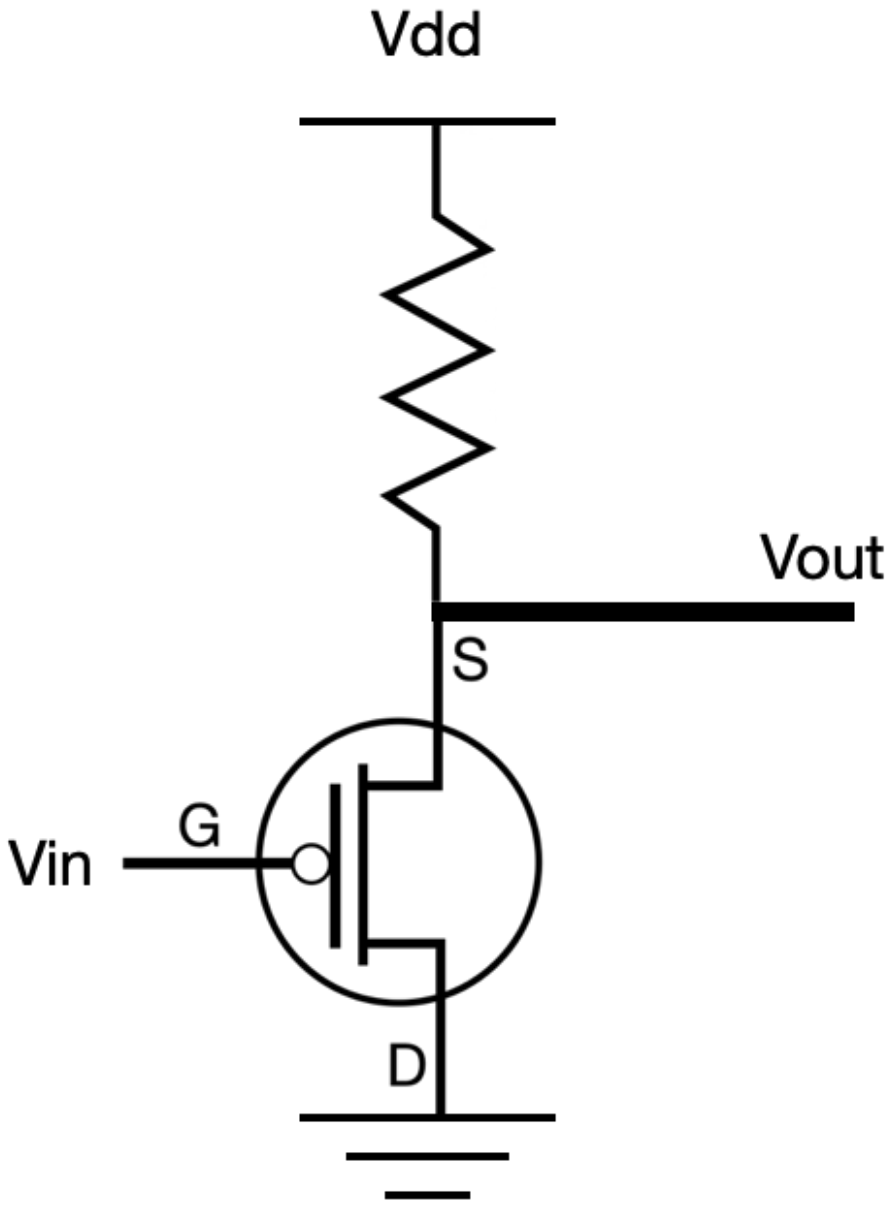


ct Answer

- Yes
- No

Question

Is following circuit an inverter?

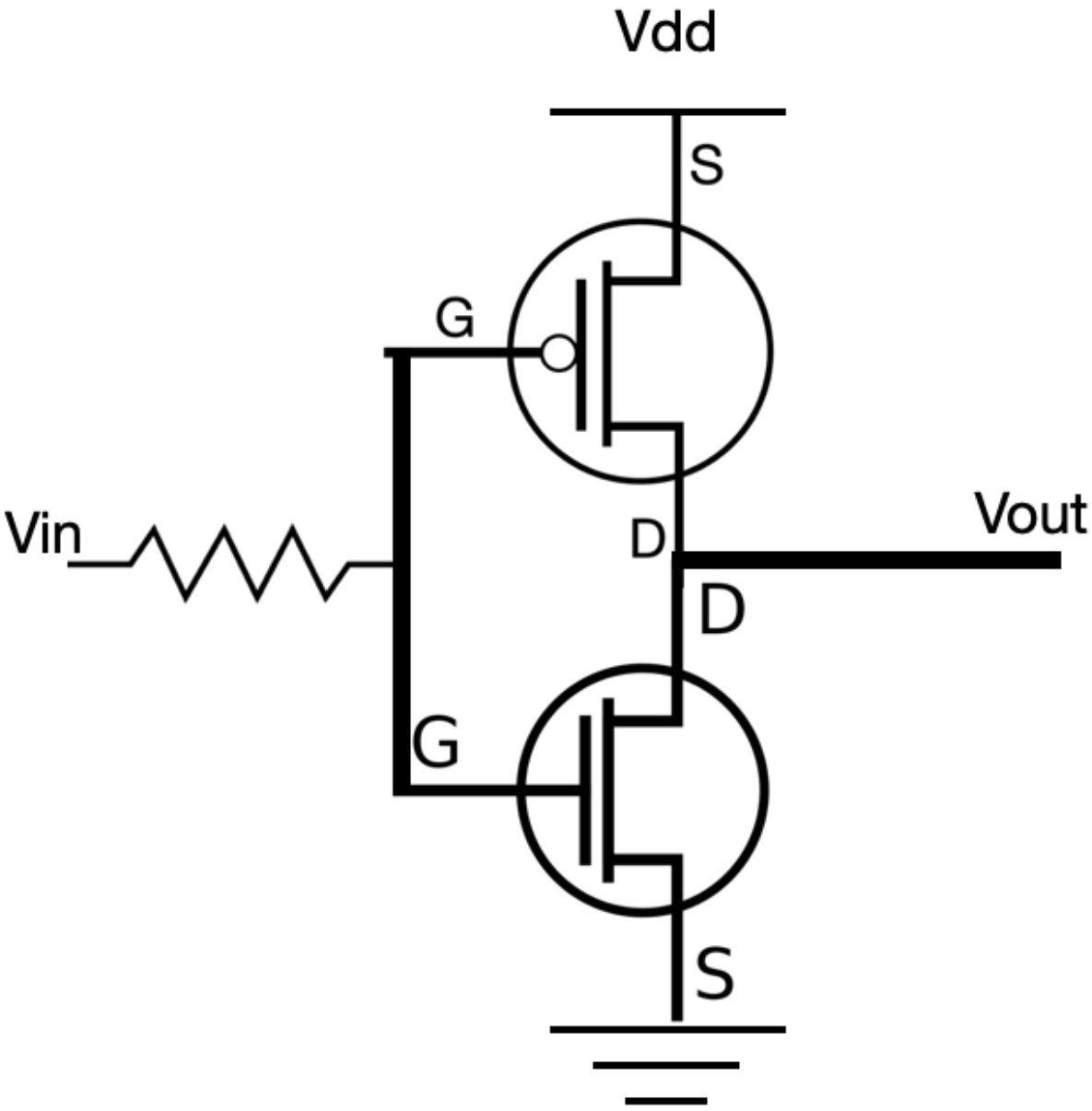


- Yes
- No

ct Answer

Question

Is following circuit an inverter?



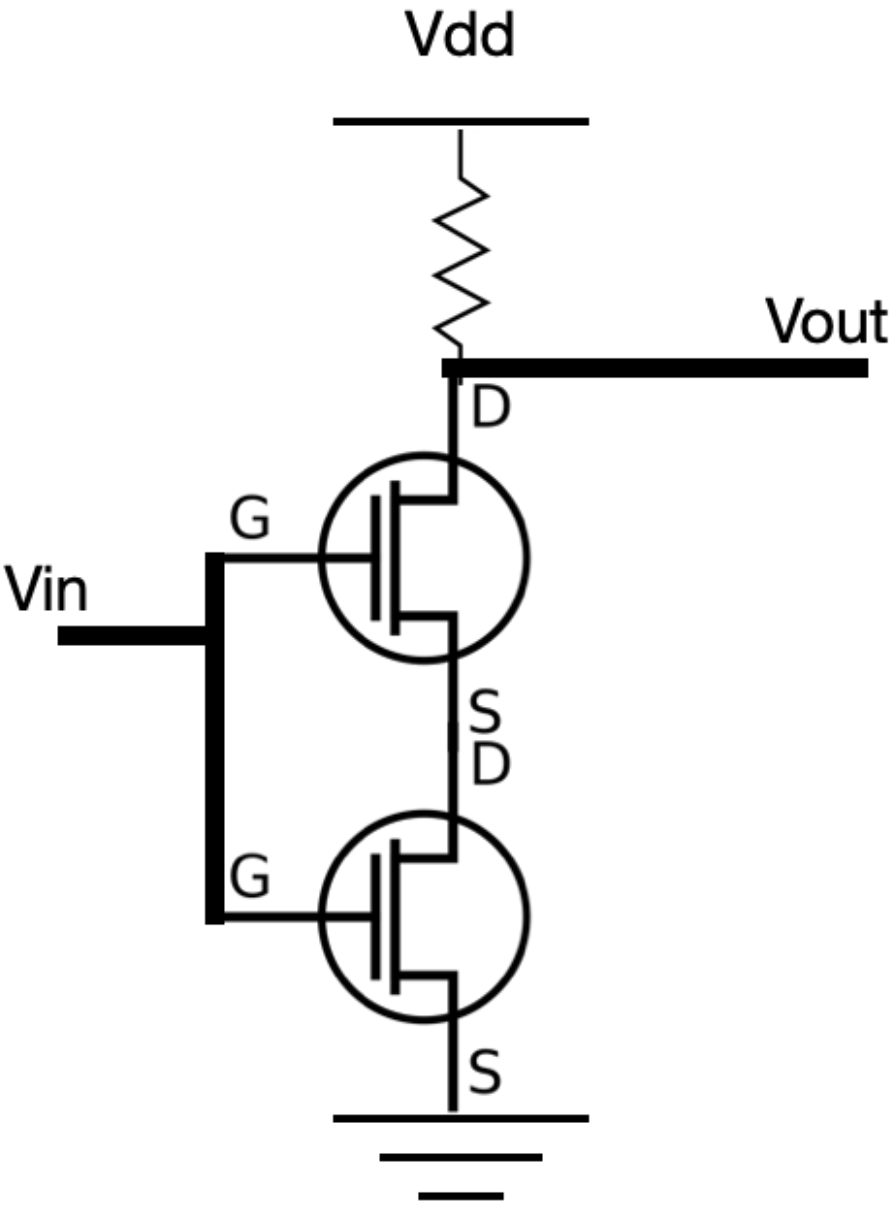
ct Answer

- Yes
- No

Pick 2 questions, 1.5 pts per question

Question

Is following circuit an inverter?

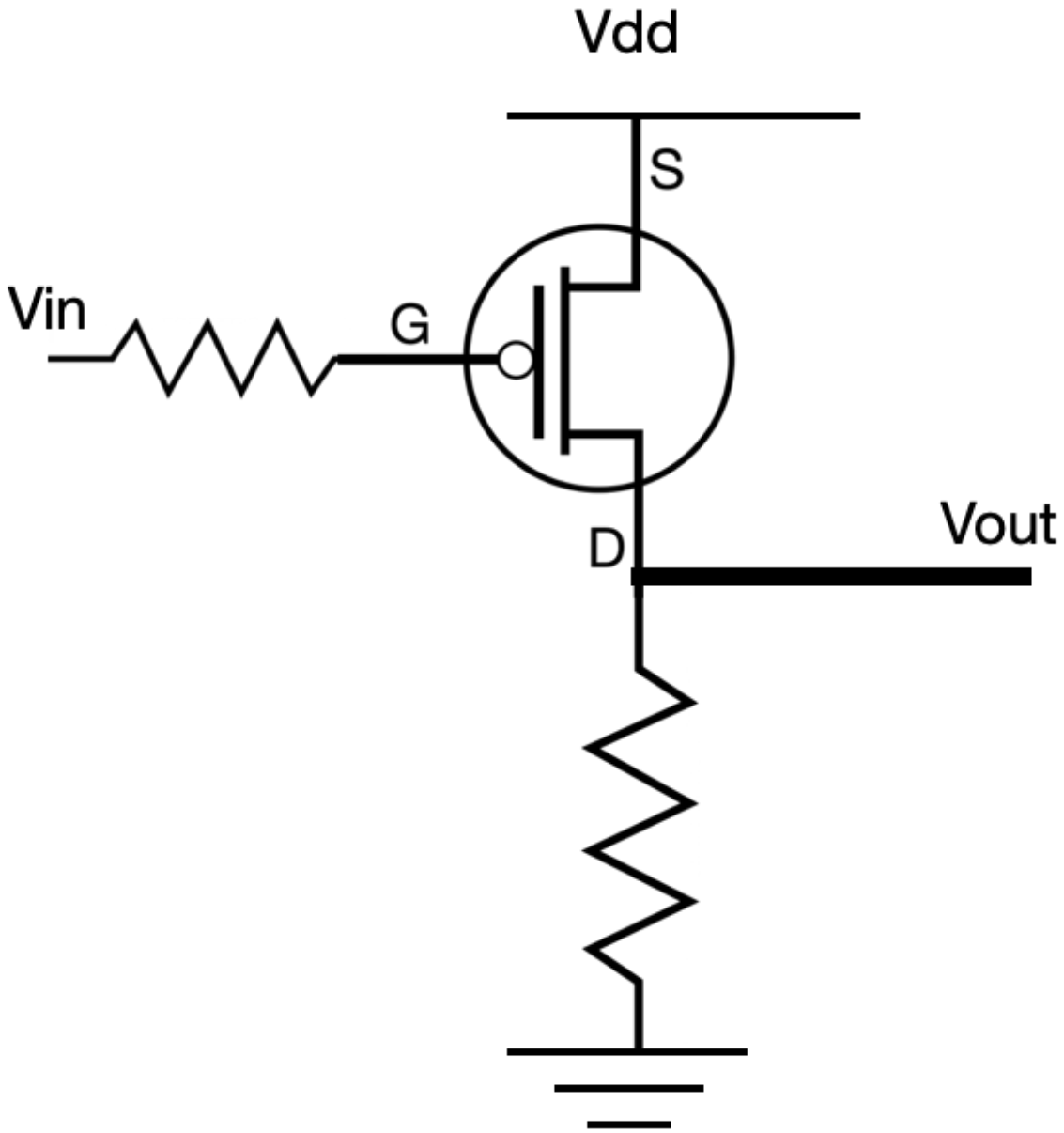


ct Answer

- Yes
- No

Question

Is following circuit an inverter?

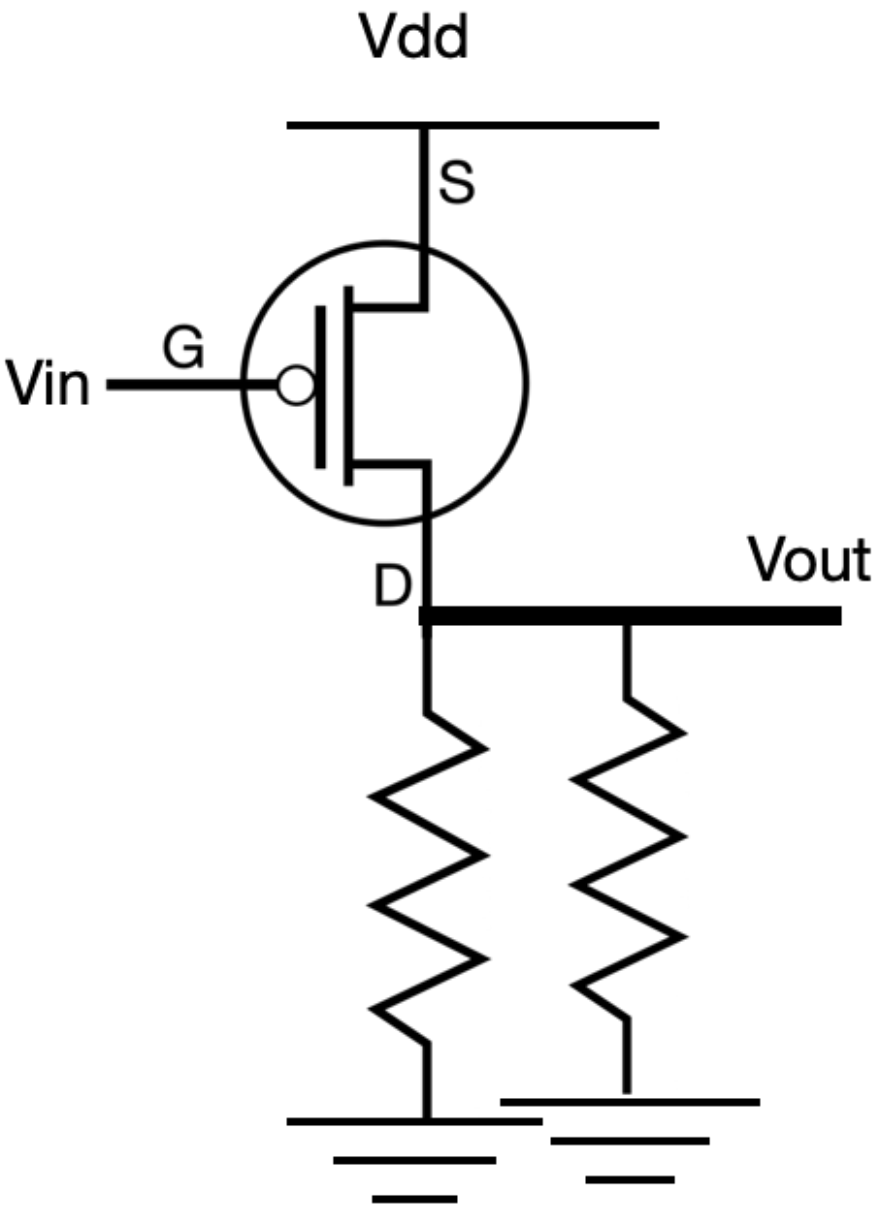


ct Answer

- Yes
- No

Question

Is following circuit an inverter?

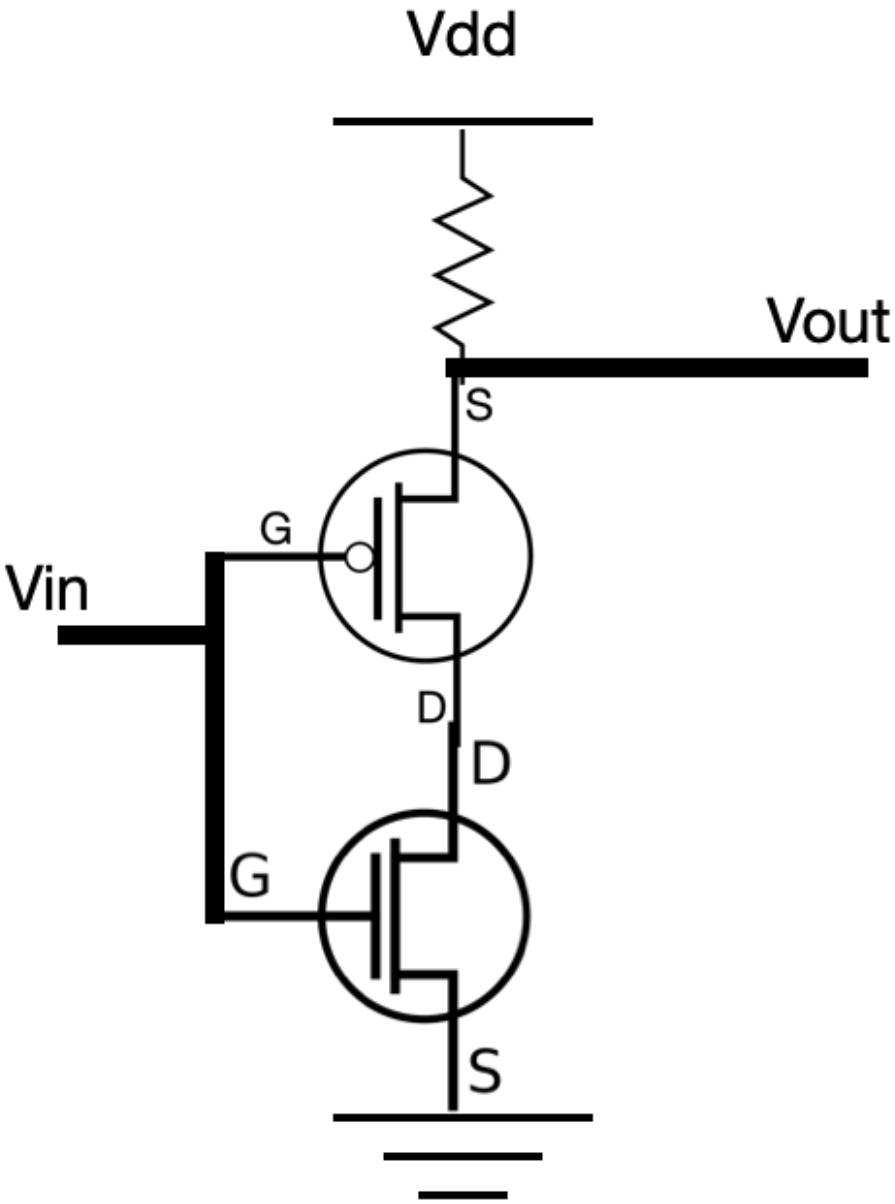


ct Answer

- Yes
- No

Question

Is following circuit an inverter?



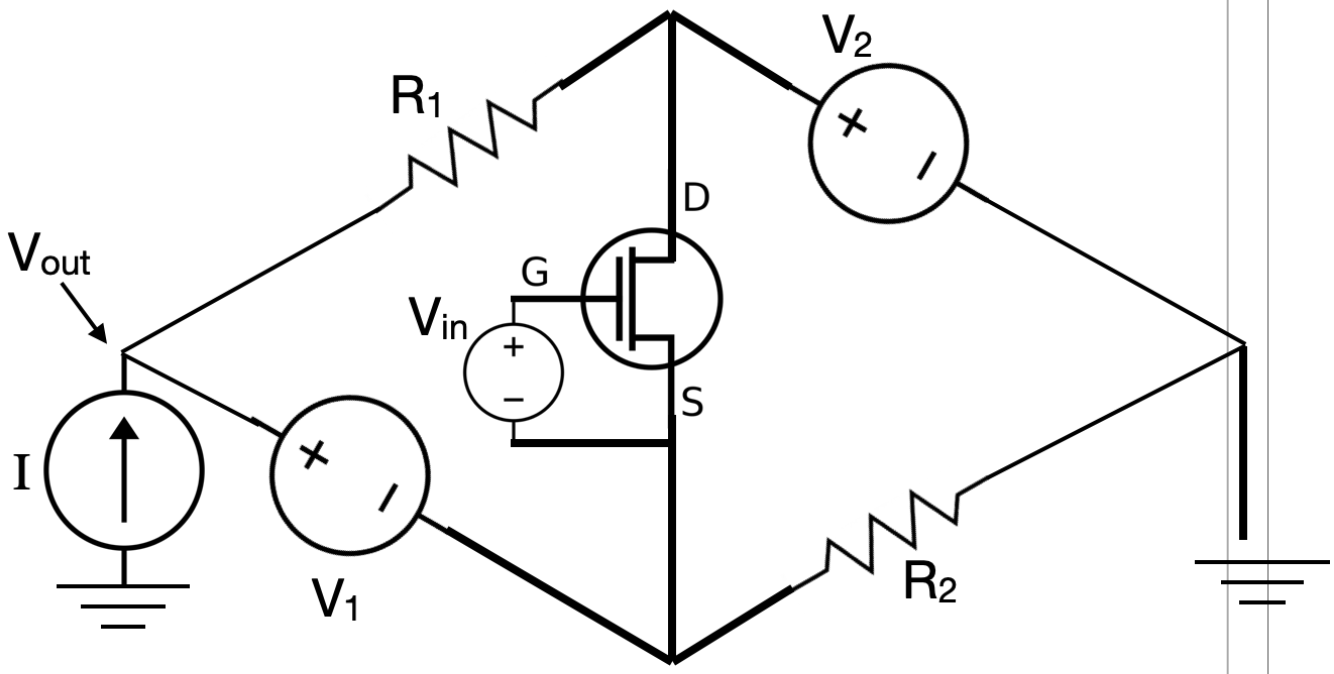
- Yes
- No

ct Answer

Pick 1 questions, 4.5 pts per question

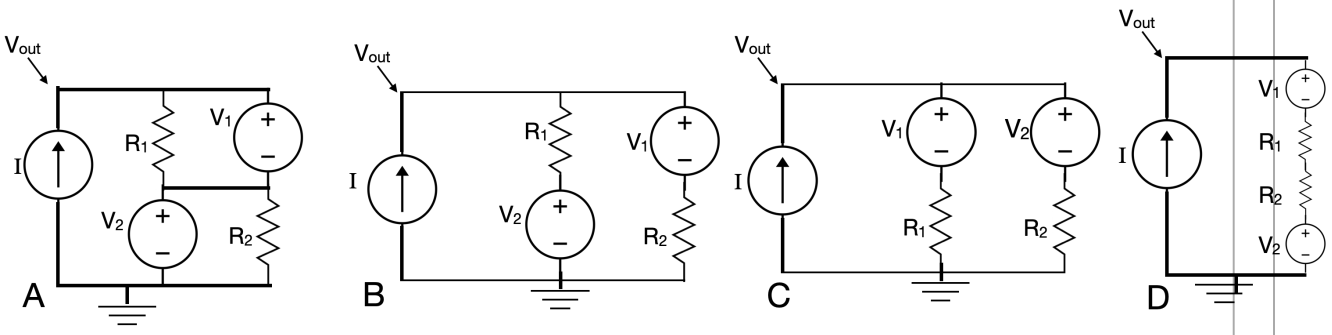
Question

Consider the following circuit, with a transistor switch model (Transistor is a short circuit for Vgs >=Vth and open circuit for Vgs < Vth):



Reference Circuit

Below are several circuits:



Answer the following questions:

1) Circuit [choose_off] is an equivalent circuit with the same Vout as the reference when Vin < Vth

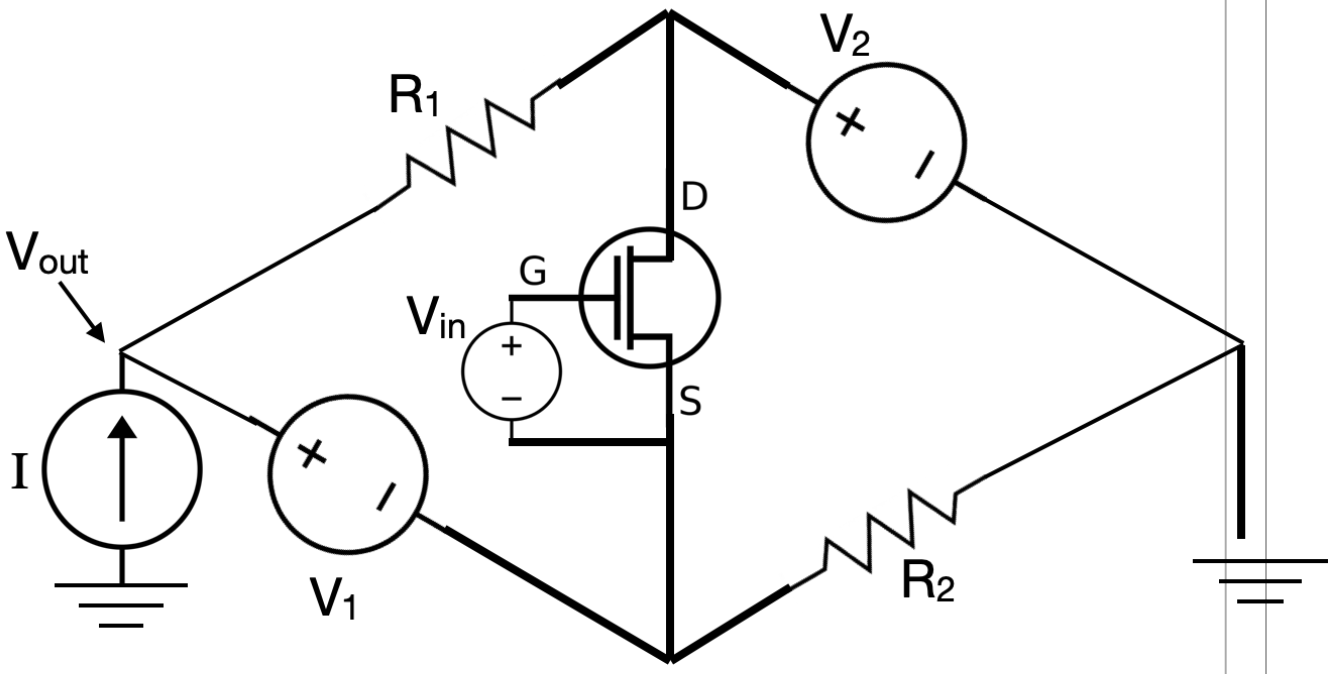
2) Circuit [choose_on] is an equivalent circuit with the same Vout as the reference when Vin >= Vth

Show Answers for choose_off

ct Answer B

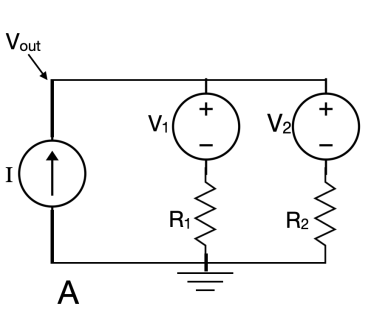
Question

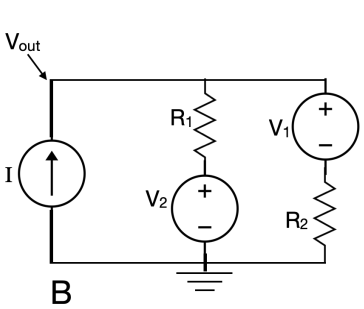
Consider the following circuit, with a transistor switch model (Transistor is a short circuit for Vgs >=Vth and open circuit for Vgs < Vth):

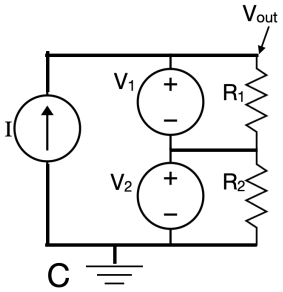


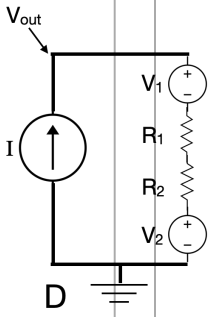
Reference Circuit

Below are several circuits:









Answer the following questions:

1) Circuit [choose_off] is an equivalent circuit with the same Vout as the reference when Vin < Vth

2) Circuit [choose_on] is an equivalent circuit with the same Vout as the reference when Vin >= Vth

Show Answers for choose_off

ct Answer B

Question

The questions below are optional, with no credit (!)

Question 0 pts

- What ..... is your name?

It is [name], King of the Britons.

- What ..... is your quest?

[Quest]. (5 words)

- What... is the air-speed velocity of an unladen swallow?

What do you mean? An [african] or [european] swallow?

Show Answers for name

Answer Arthur

+ New Question + New Question Group Find Questions

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