What is your SAGE username (ex. s1234_50)?

What is your SAGE Username (used to login to dev.cu-sage.org)?

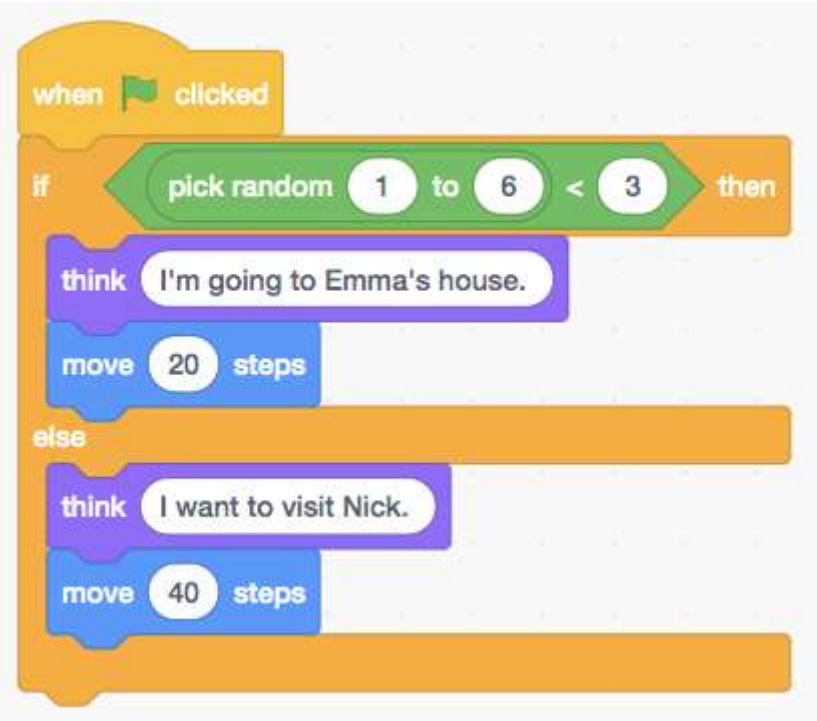
Question 1

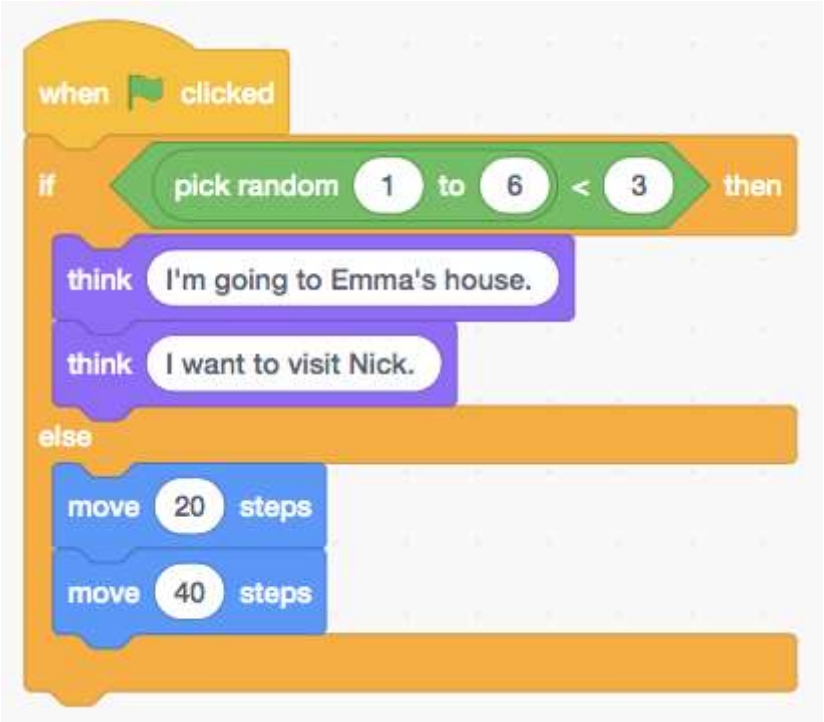
1. Mary will only go to California if her friends agree and she has more than 5 days of vacation. So, she checks her calendar and texts her friends. If she has 7 days of vacation but her friends disagree, which of the following is the outcome?

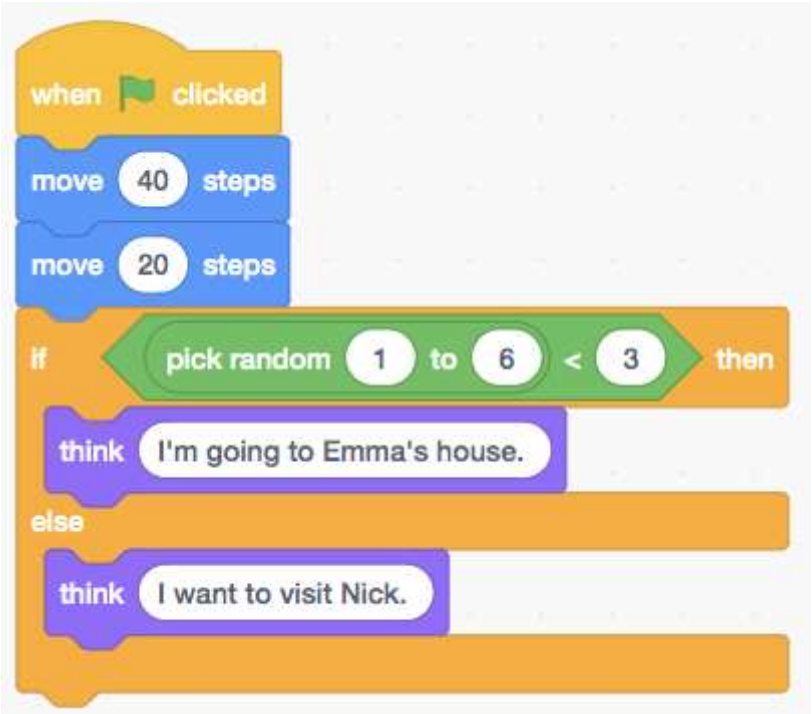
- Mary goes to California.
- Mary does not go to California.
- The chances of Mary going and not going to California are equal.
- We do not have enough information to predict if Mary goes to California.

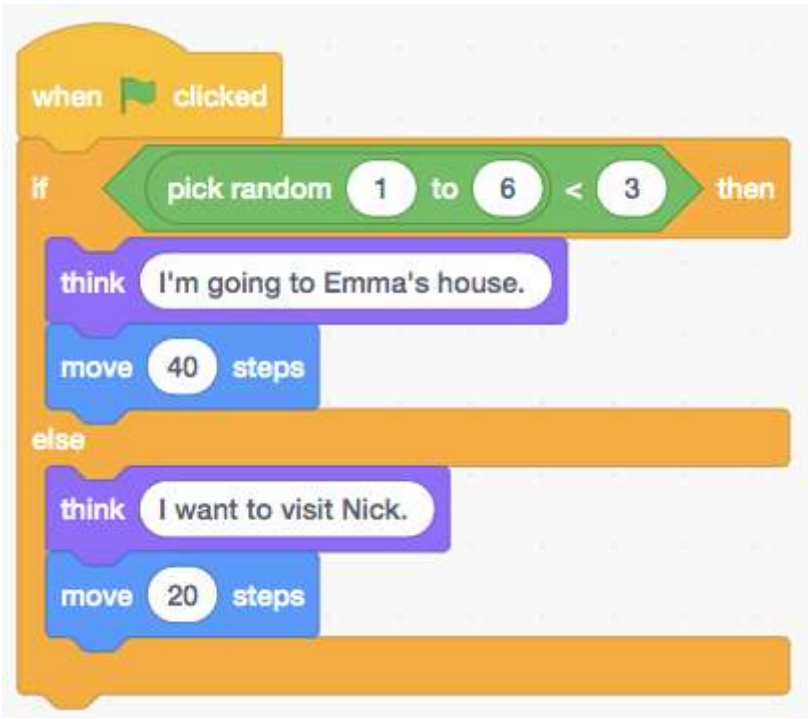
Question 2

2. You cannot decide which friend's house you want to visit, so you roll a dice. If it is less than 3, you decide to go to Emma's house and walk 20 steps. If it not, you choose Nick's house and walk 40 steps. Which of the following programming blocks tell this narrative?



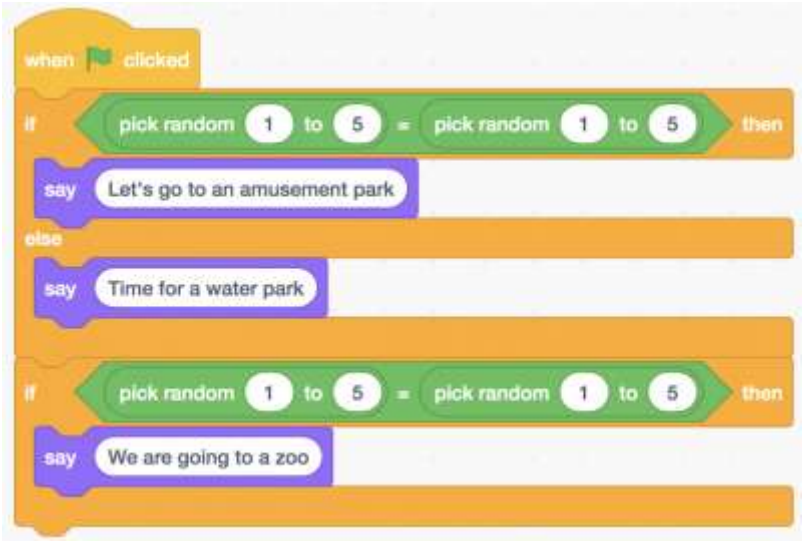

when clicked
if pick random 1 to 6 < 3 then
think I'm going to Emma's house.
think I want to visit Nick.
else
move 20 steps
move 40 steps


when clicked
move 40 steps
move 20 steps
if pick random 1 to 6 < 3 then
think I'm going to Emma's house.
else
think I want to visit Nick.



Question 3

Hannah and Max play a game to decide what they will do today. Hannah thinks of three numbers between 1 and 5. If Max guesses the first number, they will go to an amusement park. If Max selects the same second number, they will plan a trip to a water park. If he says the correct third one, they will visit a zoo. Based on the results of the game, it is possible that they do all or none of the activities. Which of the following tells this story most accurately?



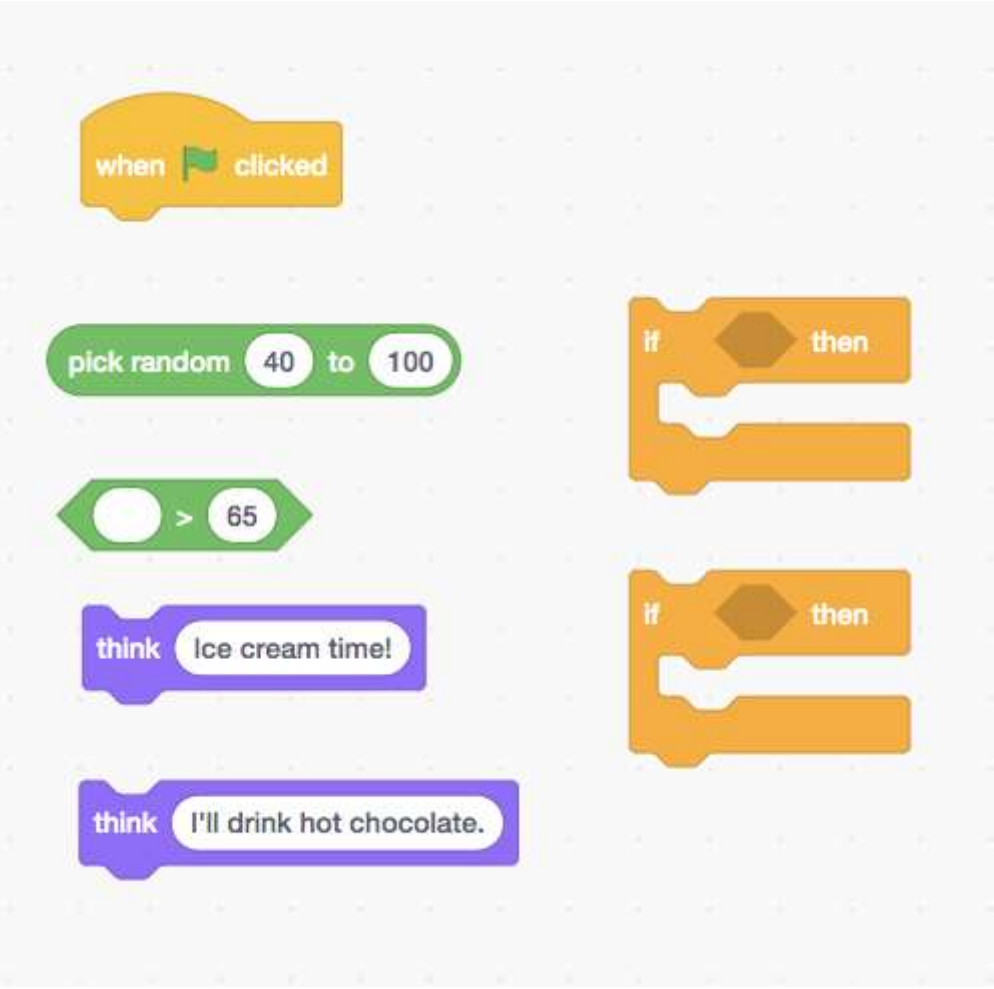

when clicked
if pick random 1 to 5 = pick random 1 to 5 then
say Time for a water park
if pick random 1 to 5 = pick random 1 to 5 then
say We are going to a zoo
if pick random 1 to 5 = pick random 1 to 5 then
say Let's go to an amusement park

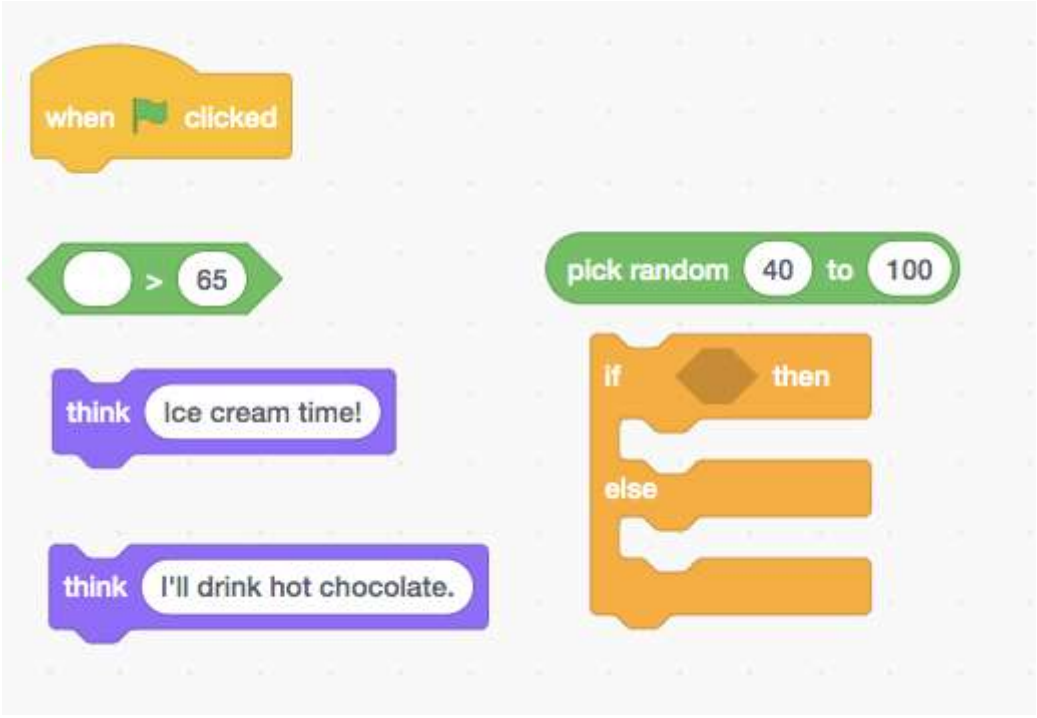

when clicked
if pick random 1 to 5 = pick random 1 to 5 then
say Let's go to an amusement park
if pick random 1 to 5 = pick random 1 to 5 then
say Time for a water park
if pick random 1 to 5 = pick random 1 to 5 then
say We are going to a zoo

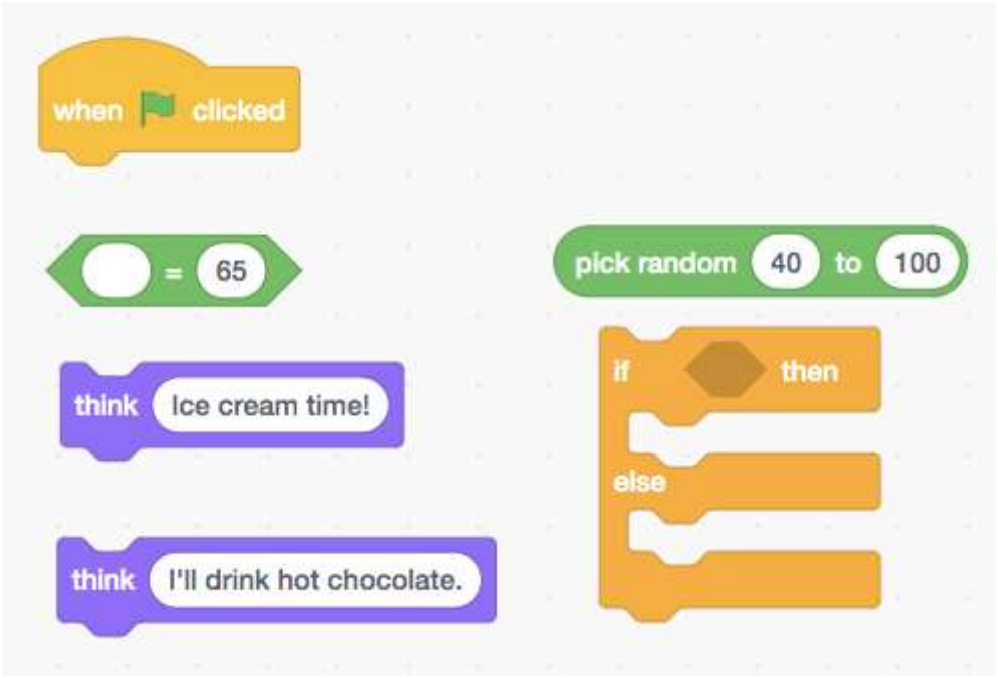

when clicked
if pick random 1 to 5 = pick random 1 to 5 and pick random 1 to 5 = pick random 1 to 5 then
say Let's go to an amusement park
else
say Time for a water park
if pick random 1 to 5 = pick random 1 to 5 then
say We are going to a zoo

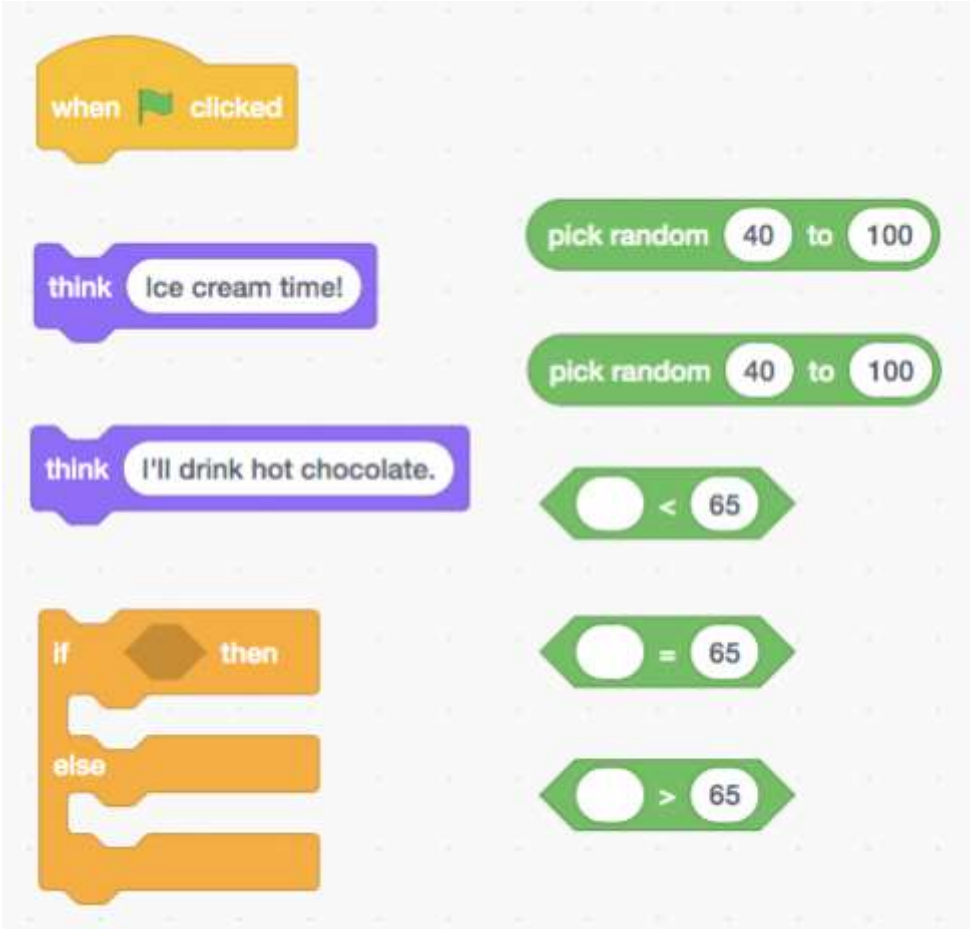
Question 4

In your town, the temperature is always between 40 and 100 degrees. You are hungry and have the the options of eating ice cream in the park if it is more than 65 degrees outside or drinking hot chocolate at home if it is not. Which of the following options contains all the correct puzzle pieces for the narration?




when clicked
> 65
think Ice cream time!
think I'll drink hot chocolate.
pick random 40 to 100
if then
else

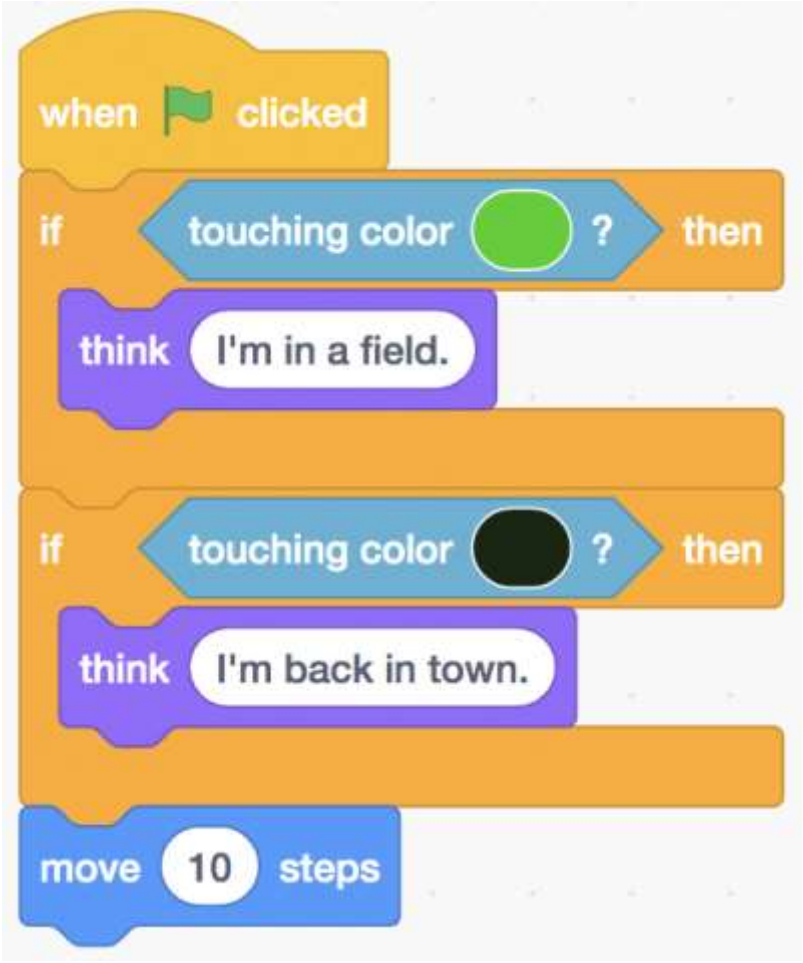

when clicked
= 65
think Ice cream time!
think I'll drink hot chocolate.
pick random 40 to 100
if then
else

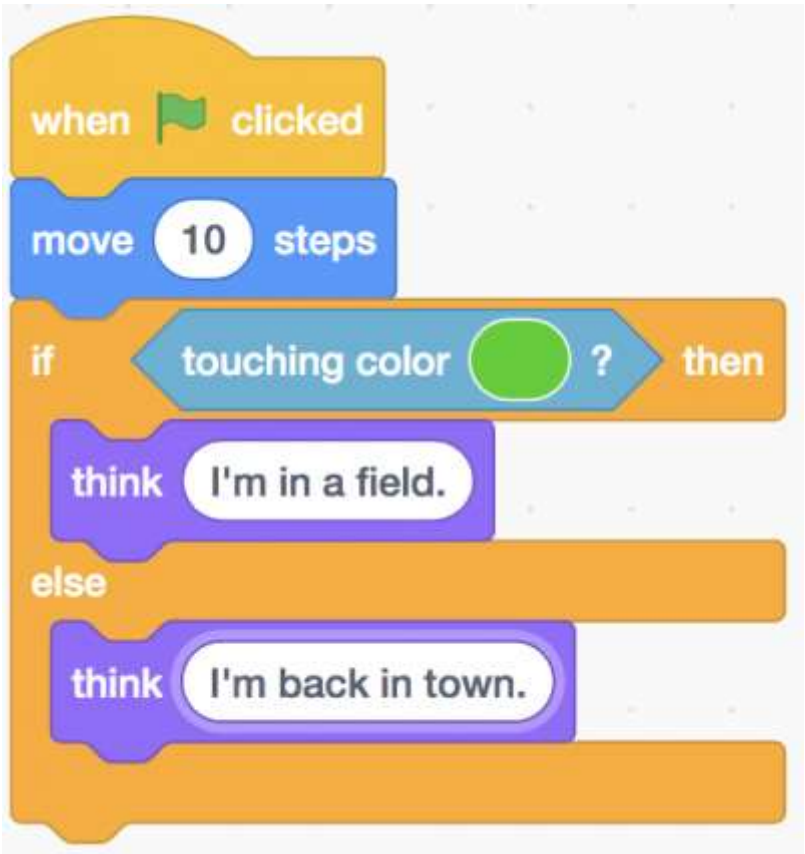


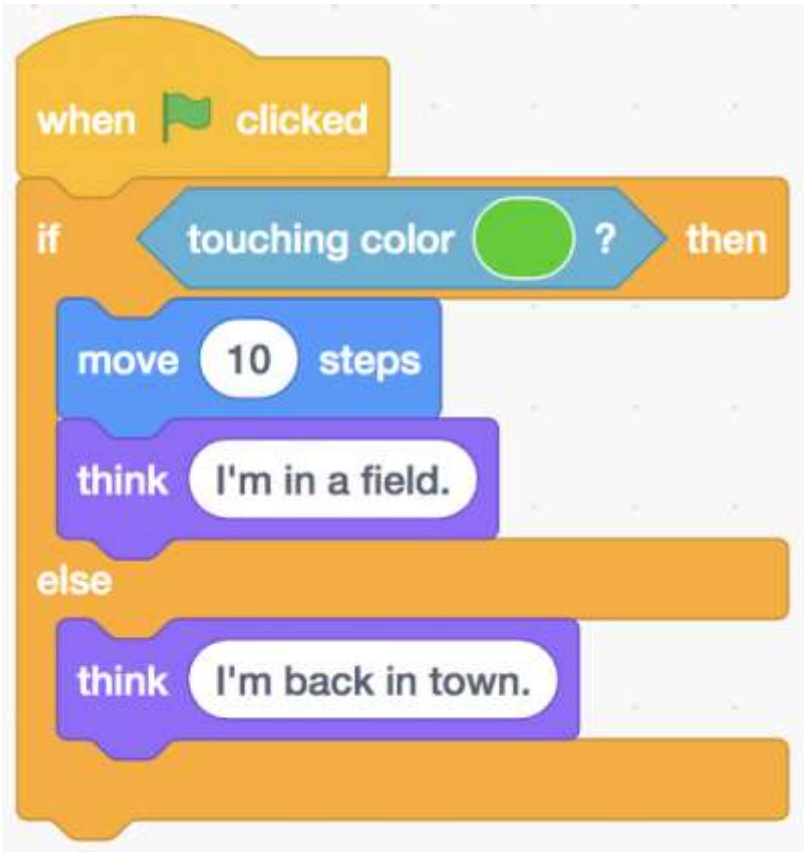
Question 5

You lost your glasses but want to know where you are, so you walk for ten steps. If you are touching something green, you know you are in a field. If not, you are in the town. Which of the following is correct?


when clicked
move 10 steps
if touching color ? then
think I'm in a field.
if touching color ? then
think I'm back in town.


when clicked
if touching color ? then
think I'm in a field.
if touching color ? then
think I'm back in town.
move 10 steps


when clicked
move 10 steps
if touching color ? then
think I'm in a field.
else
think I'm back in town.



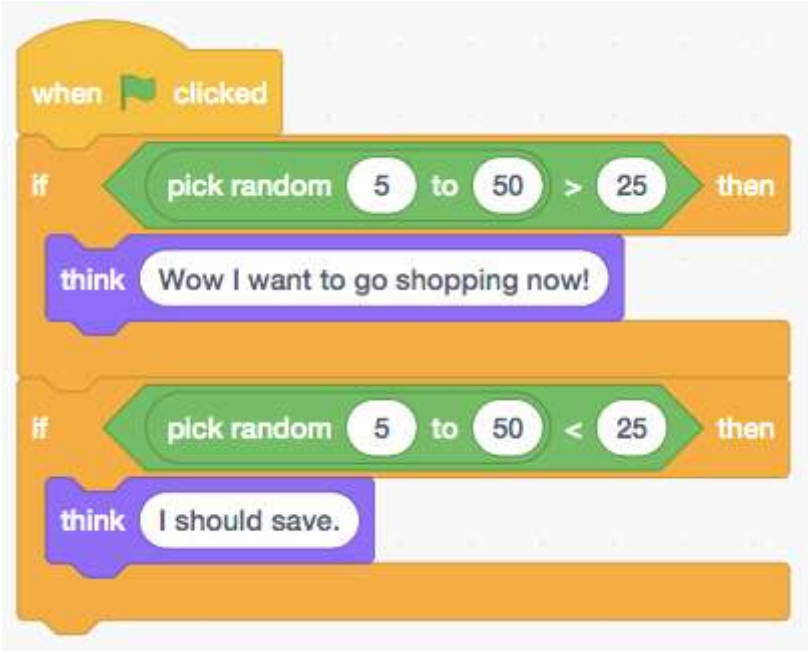
Question 6

Imagine the situation in which the number 3 is picked in the "pick random 1 to 10" block below. Where is the final location?

- x: 0, y: 0
- x: 10, y: 10
- x: -10, y: -10
- x: 10, y: -10

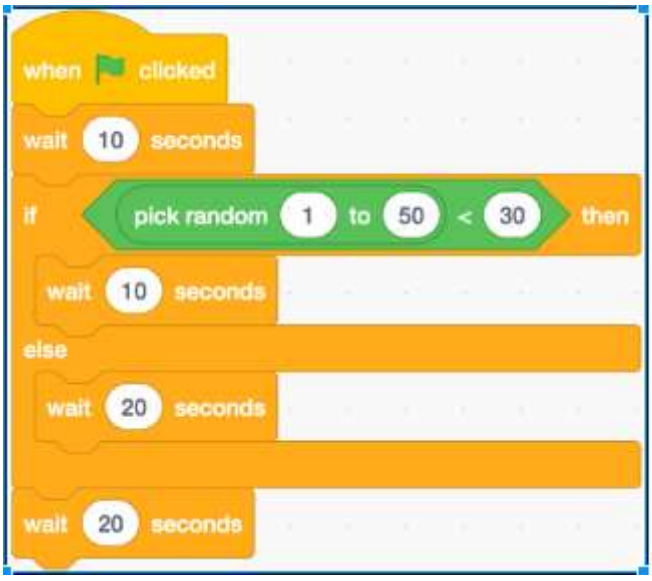
Question 7

Your aunt gave you money and you count it because she always gives you a different amount between $5 and $50. If you received more than $25, you think, “Wow I want to go shopping now!” If not, you think, “I should save.” Which of the following solutions uses the least number of puzzle pieces and is still correct?



Question 8

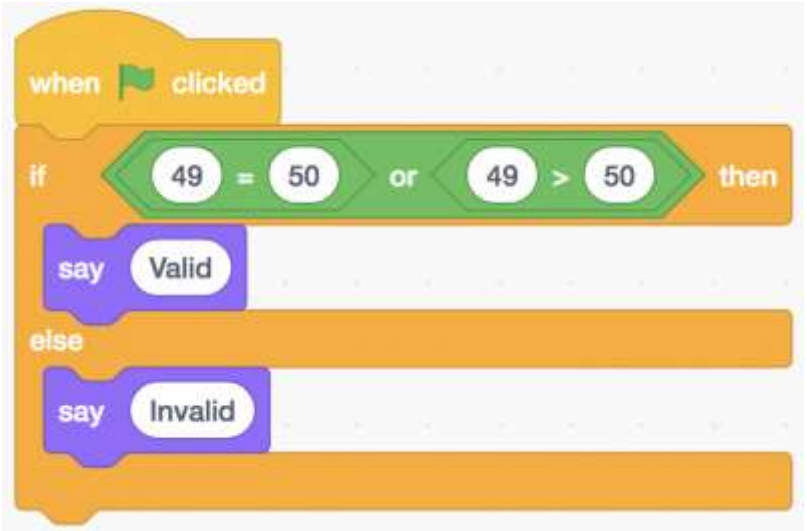
How many seconds do you wait if the random number selected is 10?

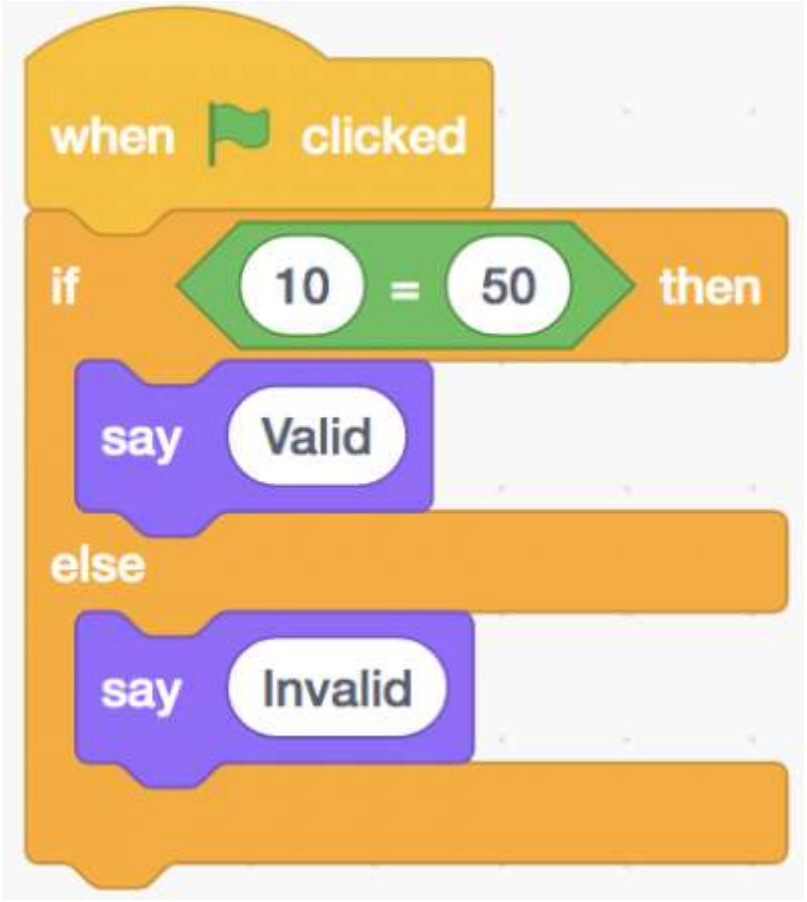


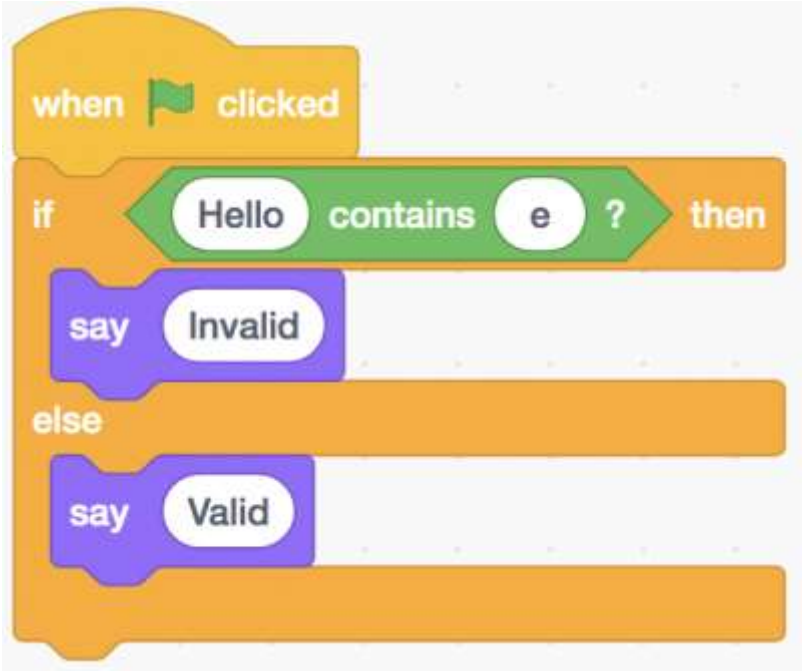
- 10
- 30
- 40
- 60

Question 9

Which of the following leads to a valid statement?







Question 10

You are playing a card game without the face cards (1-10). If you randomly pick a card that is less than 6, you lose. Else, you pick another card. If that card is less than 3, you

automatically win. If not, your turn is over. Which of the following programming blocks tells this narrative?