

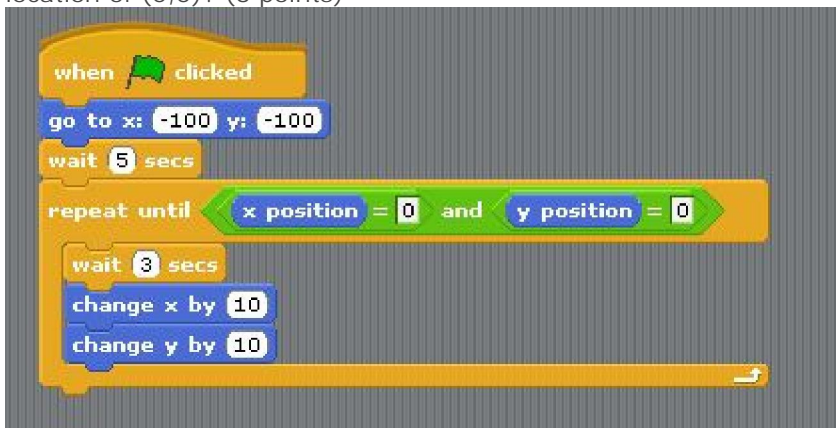


APCS 2009-2010: Scratch Final Test Part I

1. Please match the vocab term to its definition. (10 points)

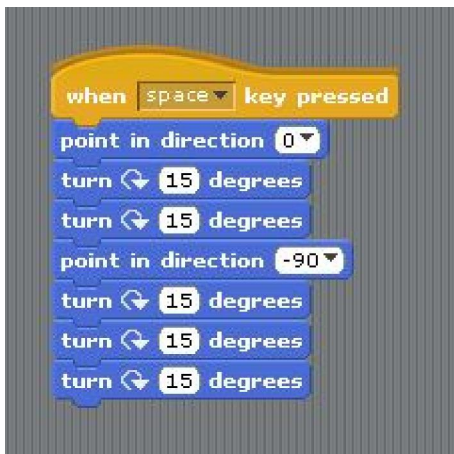
- _____ List → a. A variable that stores more than one value.
_____ Mod → b. To make a "counter" variable go up in value.
_____ Local → c. A variable that is shared by ALL sprites.
_____ Increment → d. An operator that calculates a remainder.
_____ Global → e. A variable that is limited to ONE sprite.

2. From the moment the green flag is clicked, how many seconds until the sprite reaches the location of (0,0)? (3 points)



- ☐ 30
→ ☒ 35
☐ 38
☐ 33

3. In what direction is the sprite pointing when this code is done executing? (3 points)



- ☒ -45
- ☐ 45
- ☐ 15
- ☐ -15

4. There's a tile missing that's needed to get this user input code to work. What's needed? (3 points)



- ☒ There needs to be a variable created called "name" and the tile "set name to answer" should be put in here.
- ☐ There needs to be a user input window so the tile "create input window" should be put in here.
- ☐ Nothing is needed. The code is fine.
- ☐ There needs to be an "answer" tile created, so the tile "create answer tile" should be put in here.

5. Look at the this code for a program that says dog names from a list. How many dog names will be said and which names will be said? (3 points)



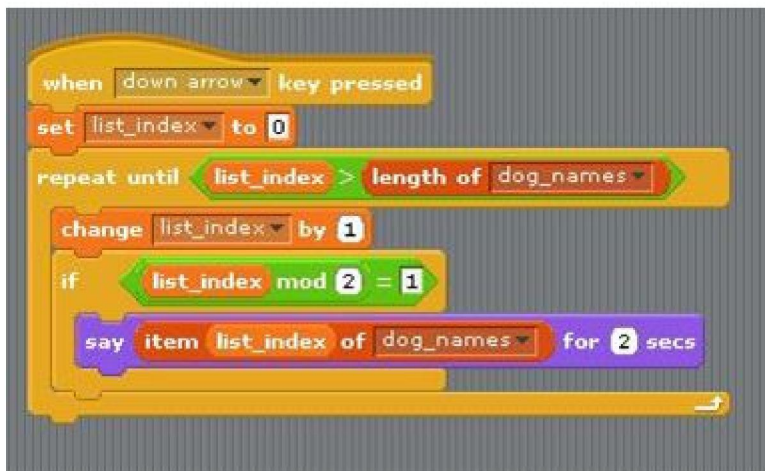
- ☐ 1 name: Maggie
- ☐ 1 name: Digger
- ☐ 2 names: Maggie and Rufus
- ☒ 2 names: Digger and Rover

6. Here is a slight modification to the dog names program. How many dog names will be said and which names will be said? (3 points)



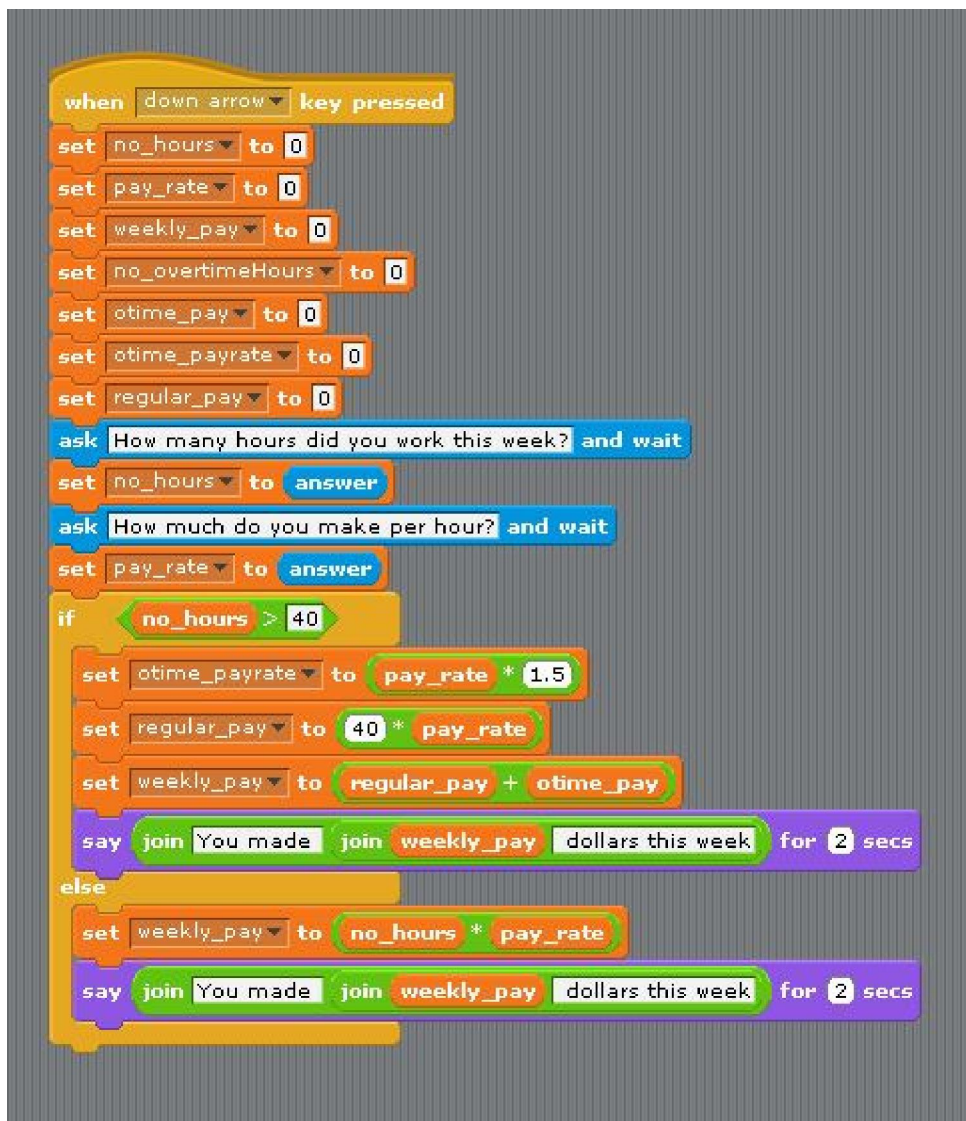
- ☐ The code won't do anything.
- ☐ 1 name: Digger
- ☐ 2 names: Digger and Rover
- ☐ 2 names: Maggie and Rufus
- ☐ 1 name: Maggie

7. What will this code do? (3 points)



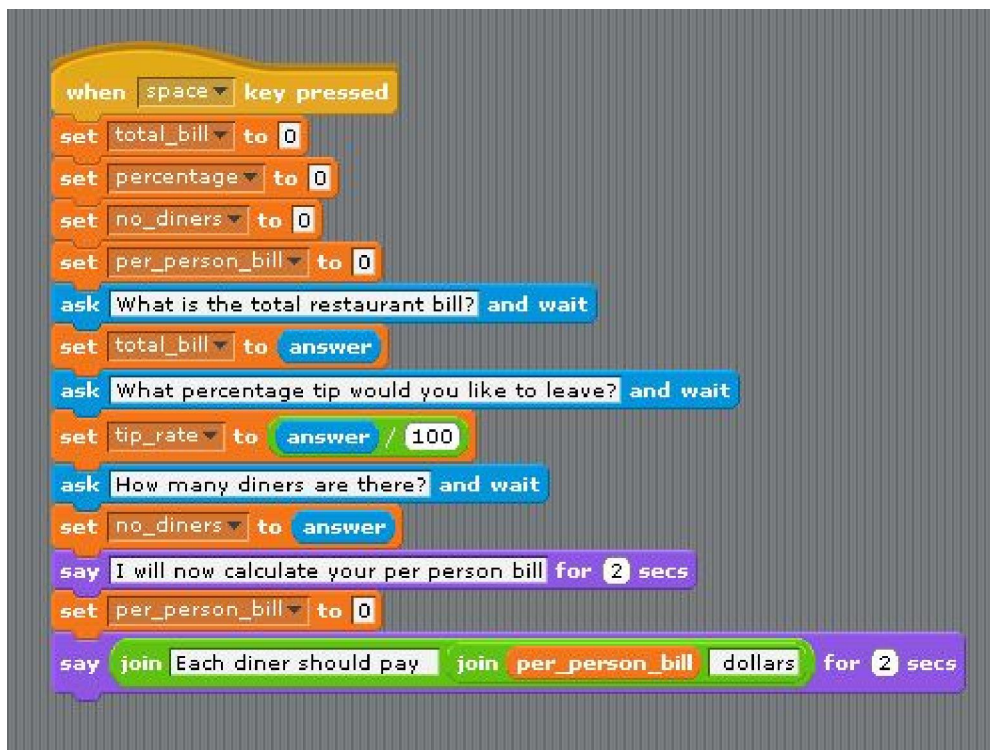
- ☐ It will say Rover Rufus.
- ☒ It will say Digger Fido Maggie.
- ☐ It won't do anything.
- ☐ It will say Maggie Fido Digger.

8. What's missing from this code? (3 points)



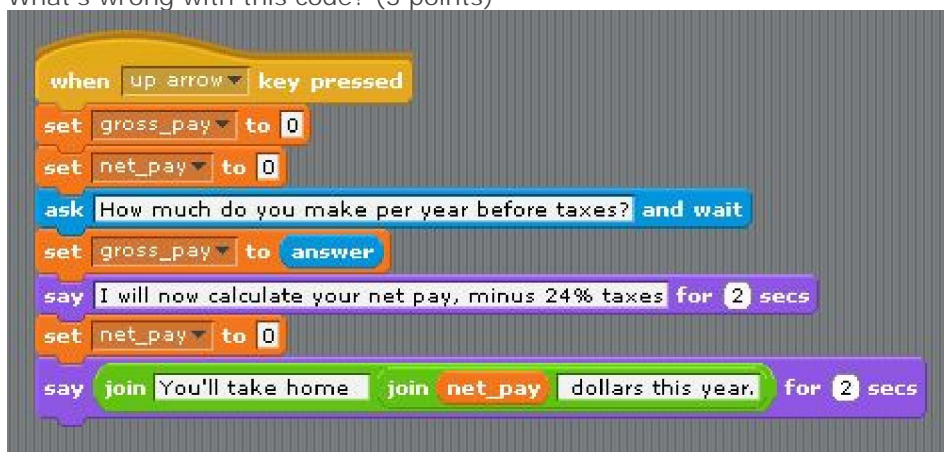
- ☐ A tile that takes user input and sets it to pay_rate.
- ☐ A tile that calculates the otime_payrate.
- ☒ A tile that calculates the otime_pay.
- ☐ A user input box that asks for the number of hours worked.

9. What's wrong with the following code? (3 points)



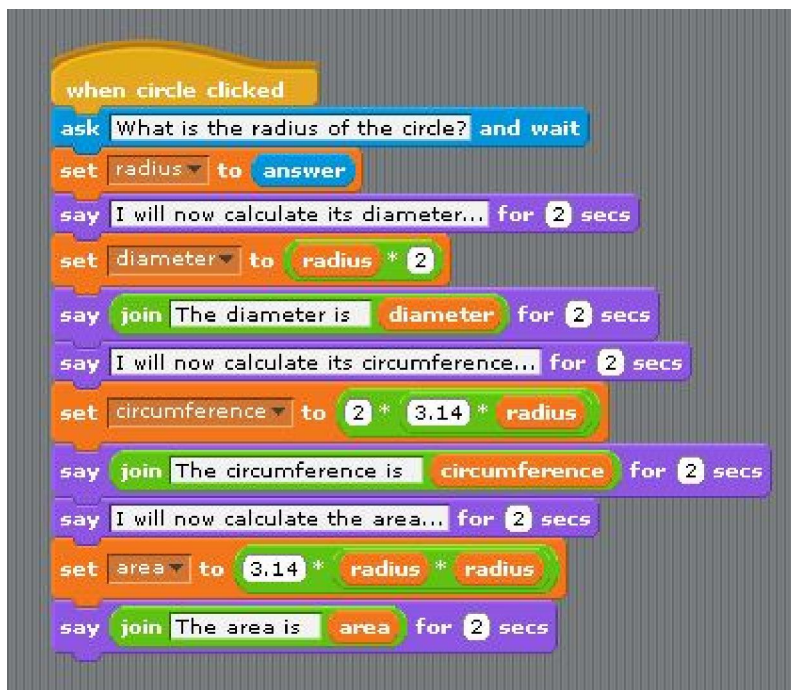
- ☐ You need to ask the user to input the tip rate as a decimal so that the math works properly.
- ☐ total_bill needs to be set to "answer"/100.
- ☐ The per_person_bill needs to be calculated with tip and multiplied by no_diners.
- ☒ The per_person_bill needs to be calculated with tip and divided by no_diners.

10. What's wrong with this code? (3 points)



- ☐ net_pay needs to be calculated as (24% of gross_pay) minus gross_pay.
- ☐ net_pay needs to be calculated as gross_pay plus (24% of gross_pay).
- ☒ net_pay needs to be calculated as gross_pay minus (24% of gross_pay).
- ☐ There is nothing wrong with this code.

11. What's wrong with this code? (3 points)



- ☐ There should be a Boolean operator in the diameter calculation.
- ☐ There is nothing wrong with this code.
- ☐ Use the "square" tile instead of radius*radius.
- ☐ You need to create user input variables for area and circumference.