Operations

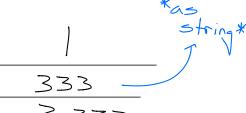
1. Assume the following variable declarations have been made, what are the values of each of the following lines of code?

$$i = 3$$

$$k = "3"$$

$$x = 3.0$$

$$y = 2.5$$



Circle any of the following expressions which evaluates to true:

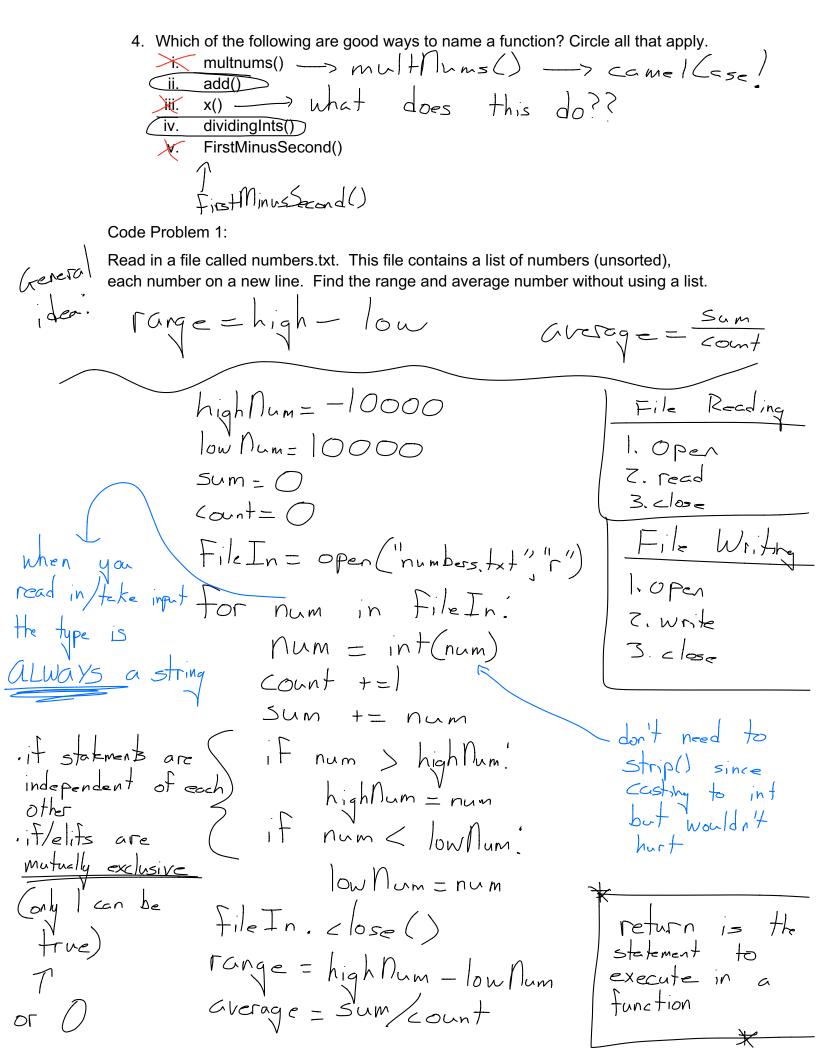
$$a = 11$$

$$b = 30$$

$$d = "z"$$

("P)"z")or (1 >30)

3. What prints out after the following lines are executed?



Problem 2

Write a program that simulates rolling two dice. Ask the user if they would like to specify the number of sides the dice have. If they don't want to, assume they want to roll standard 6-sided dice. After rolling the dice, sum them, and write the number to a

roll standard 6-sided dice. After rolling the dice, sum them, and write the number to a file called 'results.txt.' roll () with number of sides Z. (all General Idea: 3. Sum results, write out 1. Prompt user -it yes get sides random det roll (num Sides = 6).

returns num rolled alteratively (I numsid=s+1) no you don't 'need return random. randrange (num Sides) + 1 det main (): Sides = 6 Specify = input ("Would you like to specify numsids?") if specify.lower() == "y": sides = int (input ("How many?")) Sum = 0

For i in range(z): roll Two = roll (sides)

Sum += roll(sides)

Sum = roll One + roll Two File Out = open ("results.txt" "w") Print(sum file = fileOut) file Out close ()

main()

only differences with writing

Problem 3

What is the difference between a while loop and a for loop? Why would you want to use a for loop as opposed to a while loop? Why would you want to use a while loop as opposed to a for loop? Give an example of the a common 'problem' you'd solve

with each loop.

- when you know how many times you want to iterate - iterating through seguences -Strings - range word="hella" Two main types: Ranged-based: h, e, 1, 1, 0 tor in range (len (word)): 1. would be 0, 1, 2, 3, 4

while

- when you don't know
how many times you
want to loop to repeat
ex.

taking user input

- iterate until the condition
is met, however long
that might take

Problem 4

There are errors in the code below. Try to find them all

1). while True: print("Hello")

Mo way to break infinite I loop

2).

for index in list

print(index)

3). if myString = "this":

=> assignment operator == > comparison myString = "that"

4). print("I have " + x + " apples")

4). x = random.range(1, 11, 0) y = -1 y

str(x) = left and right side

must be strings

Single Line Comment symbol:

comment

Multi Comments:

11 11 1, comment 11 11 11