CS final

1 Quiz 1

question 1

This symbol marks the beginning of a comment in Python

- # ←

- &

- **

- *

question 2

A ___ is a name that represents a value that does not change during a program's execution

- variable signature

- named constant ←

- key term

- named literal

question 3

Which of the following statemens will cause an error?

- x = '17'

- 17 = x ←

- x = 17

- x = 9999

question 4

This operator performs integer divison:

- %

- // ←

- *

- **

question 5

which is NOT a legal identifier?

- 7thheaven ←

- outrageouslyAndShockinglyLongRunon

- lovePotionNumber9

- _42

question 6

Of the following variable names, which is the best one for keeping track of whether a patient has a fever or not?

- feverTest
- Temperature
- fever
- hasFever ←

question 7

the character escape sequence to force the cursor to go to the next line is:

- \n ←
- \t
- \'
- \"

question 8

which of the following is used to take the input in float?

- float(input()) ←
- float(float())
- string(input())
- int(input())

question 9

The following code multiplies 10 times the quantity 5 + 3, yielding the result 80: 10 * 5 + 3

- True
- False ←

question 10

the value of the expression '7' + '3' is the:

- integer 73
- integer 10
- string '10'
- string '73' ←

question 11

what does the int function attempt to do in the following code?

```
value = input('Enter an integer: ')
value = int(value)
```

- Convert a non-object to an object

- Convert an integer to a string

- convert a string to an integer ←

- None of the above

quesion 12

which of the following is false?

- `if number1 == number2:`
    `print(number1, 'is equal to', number2)`

- each if statement consists of the keyword if, the condition to test, and a (:) followed by an intended body

- forgetting the colon (:) after the condition is a common syntax error

- each body of if statement contains zero or more statements ←

question 13

Information in the main memory unit is _. Its typically lost when the computers power is turned off

- constant

- sticky

- volatile ←

- persistaent

question 14

A(n) _ is the smallest data item in a computer. It can have the value 0 or 1

- byte

- field

- bit ←

- record

What value is produed when Python evaluates the following expression

```
5 * (12.7 - 4) / 2
```

- 29.5

- 21.75 ←

- 21

- None of the above

Quiz 2

question 1

A(n) _ is the process of inspecting data that has been input to a program to make sure it is valid before it is used in computation

- Correcting data

- correcting input

- data checking

- Input validation ←

question 2

in Python, an infinite loop occurs when the computer accesses the wrong memory address

- True

- False ←

question 3

Which of teh following represents an example to calculate the sum of the numbers (accumulator)?

- total + number = total

- number +=number

- total = number

- total += number ←

question 4

What is the format for the while clause in Python?

- while condition

- while condition: statement

- while condition: ←

- while condition statement

question 5

what is not an example of an augmented assignment operator?

- ¡= ←

- /=

- *=

- -=

question 6

IN python the variable in the for lause is reffered to as the _ because it is the target of an assignment at the beginning of each loop iteration

- for variable

- count variable

- loop variable

- target variable ←

question 7

When will the following loop terminate?

```
while leep_on_going != 999:
```

- when keep_on_going refers to value less than 999

- when keep_on_going refers to a value not equal to 999

- when keep_on_going refers to a value greater than 999

- when keep_on_going refers to a value equal to 999 ←

question 8

What are the values that the variable num contains through the iterations of the following for loop?

```
for num in range(4)
```

- 1,2,3,4

- 0,1,2,3 ←

- 0,1,2,3,4

- 1,2,3

question 9

In flowcharting, the decision structure and the repition structure both use the diamond symbol to represent the condition that is tested

- True ←

- False

question 12

What are the values that the varibale contains through the iterations of the following for loop?

```
for num in range(2,9,2)
```

- 2,3,4,5,6,7,8,9

- 1,3,5,7,9

- 2,5,8

- 2,4,6,8 ←

question 10

Both of the following for clauses would generate the same number of loop iterations

```
for num in range(4):
for num in range(1,5)
```

- True ←

- False

question 11

What type of loop stricture repeats the code based on the value of the Boolean expression

- Boolean-controlled loop

- count-controlled loop

- number-controlled loop

- condition-controlled loop ←

question 13

When using the _ logical operatorm one or both of the subexpressions must be true for the compound expression to be true

- or ←

- not

- maybe

- and

question 14

Which of the foliiwing is the correct if clause to determine whether y is in range 10 through 50, inclusive

- if >= 10 ad y <=50; ←

- if 10 > y and y <50;

- if y>=10 or y<= 50;

- if 10 < y or y > 50;

question 15

A(n) _ is any piece of data that is passed into a function when the function is called

- local varuable

- argument ←

- global variable

- parameter

question 16

What will display after the following code is executed?

```
def main():
    magic(5)
def magic(num):
    answer = num + 2 * 10
    print(answer)
main():
```

- 100

- 25 ←

- Nothing

- 70

Exam 1

question 1

Functions can be called from statemtnts in the body of a loop and loops can be calledfrom within the body of a function

- True
- False ←

question 2

What is the result of the following Boolean expression given that x=5,y=3, and z=8?

x < y or z > x

- 8
- False
- True ←
- 5

question 4

Which of the following is the correct if clause to determine whether y is in range 10 through 50 inclusive

- if 10 < y or y > 50
- if y >= 10 and y<=50 ←
- if 10 > y and y < 50
- if y>=10 or y<=50

question 3

see quiz 2 question 9

question 5

Reducing duplication of code is one of the advantages of using loop structure

- True ←
- False

question 6

After the execution of the following statement, the variable price will reverence the value _

price = int(68,549)

- 68 ←
- 68.6
- 68.55
- 69

question 7

question 8

different functions can have local variables with the same names

- True ←
- False

question 9

The main reason to use secondary storage is to hold date for long periods of time even when the power supply to the computer is turned off

- True ←
- False

question 10

The python language is not sensitive to block sturcturing of code.

- True
- False ←

question 11

the not operator is a unary operator which must be used in a compound expression

- True
- False ←

question 12

Whihc of the following is the correct if clause to determine wheter choice is anything other than 10?

- if choice != 10
- if choice ¡¿ 10
- if not(choice ¡ 10 and choice ¿ 10):
- if choice != 10: ←

question 13

the first line in a while loop is reffered to as the condition clause

- True
- False ←

question 14

A function defginition specifies what a function does and causes the function to execute

- True
- False ←

question 15

Both of the following for clauses would generate the same number of loop iterations.

```
for num in range(4):
for num in range(1,5):
```

- True ←
- False

question 16

see quiz 2 question 5

question 17

What does the following statement mean?

```
num1, num2 = get_num()
```

- the function get_num() will recieve the values stored in num1 and num2
- the function get_num() is expected to return one value and assign it ot num1 and num2
- the statement will cause a syntax error
- the function get_num() is expected to return value for num1 and for num2 ←

question 18

what does the following program do?

```
student = 1
while student <=3:
   total = 0
   for score in range(1,4):
      score = int(input("enter test score:"))
      total += score
   average = total/3
   print("Student",student,"average:",average)
   student += 1
```

- It accepts 3 test scores for each of 3 students and outputs the average for each student ←
- It accepts one test score for each of 3 students and outputs teh average of the 12 scores
- it accepts 4 test scores for 3 students and outputs the average of the 12 scores
- it accepts 4 test scores 2 students, then averages and outputs all the scores

question 19

_ is the process of inspecting data that has been input into a program in order to ensure that the data is valid before it is used in a computation

- Data validation

- Correcting input

- Correcting data

- input validtion ←

question 20

THe python language uses a compiler which is a program that both translates and executes the instruction in a high-level language

- True

- False ←

question 21

Which tpye of error preventsthe program from running?

- logical

- grammatical

- human

- syntax ←

question 22

according to the behavior of integer division is divided by an integer, the result will be a float

- True

- False ←

question 23

In python, print statements written on sperate lines do not necessarily ouput on seperate lines

- True ←

- False

question 24

since a named constant is just a variable, it can change any time during a program's execution

- True

- False ←

question 25

what is the informal language used by programmers use to create models of programs that has no syntax rules and is not meant to be compiled or executed?

- source code

- flowchart

- pseudocode ←

- algorithm

question 27

which of the following will display 20%?

- `print(format(0.2,'%'))` <enter>

- `print(format(20,'.0%'))` <enter>

- `print(format(0.2 * 100, ':0%'))` <enter>

- →

    `print(format(0.2, ':0%'))` <enter>

question 26

after the execution of the following statement thevariable sold will reference the numeric literal value as (n) _ data type

`sold = 256.752`

- currency

- int

- float ←

- str

question 28

the if statement causes one or more statemnts to execute only when a Boolean expression is true

- True ←

- False

question 29

Python allows you to compare strings, but it is not case sensitive

- True

- False ←

question 30

A(n) _ strucure is a logical design that controls the order in which a set of statements execute

- function
- iteration
- sequence
- control ←

question 31

When using the __ logical operator both submissions must be true for the compound expression to be true

- and ←
- either or and
- not
- or

question 32

See quiz 2 question 2

question 33

When will the following loop terminate?

`while keep_on_going != 999:`

- when it refers to a value equal to 999 ←
- when it refers to a value not equal 999
- when it refers to a value greater than 999
- when it refers to a value less than 999

question 34

A hierarchy chart shows all the steps that are taken inside a function

- True
- False ←

question 35

It is recommended that programmera avoid _ varuables in a program whenever possible

- string
- local
- global ←
- keyword

question 36

Which of the following will assign a random integer in the range of 1 through 50 to variable a number?

- number = random.rantin(1,50) ←

- number = random(range(1,50))

- random(1,50) = number

- randint(1,50) = number

question 37

what will the output after the following code is executed

```
def pass_it(x,y):
    z = x,",",y
num1 = 4
num2 = 8
answer = pass_it(num1,num2)
print(answer)
```

- 4,8

- None ←

- 8,4

- 48

question 38

A software developer is the person with teh training to design, create, and test computer programs

- True ←

- False

question 39

Which of the following returns the largest integer that is less than or equal to its argument

- greater

- lesser

- ceil

- floor ←

question 41

The process known as the _ cycle is used by the CPU to execute instructions in a program

- decode-fetch-execute

- fetch-decode-execute

- decode-execute-fetch

- fetch-execute-decode

question 40

In a nested loop, the inner loop goes through all of its iterations foe each for each iterations of the outer loop

- True ←
- False

question 42

In Python, math expressions are always evaluated left ot right no matter what the operators are

- True
- False ←

question 43

the ___ function reads a piece of data that has been entered at the keybpoard and returns that piece of data as a string back to the program

- eval_input()
- str_input()
- input() ←
- output()

question 44

the randrange function returns a randomly selected value from a specific sequence of numbers

- True ←
- False

question 45

Python formats all floating-point numbers to two decimal places when outputting with the print statement

- True
- False ←

questions 46

short-circuit evaluation is only performed withthe not operator

- True
- False ←

questions 47

what is the result of the following Boolean expression, given that

```
x = 5, y = 3, z = 8
not (x < y or z > x) and y < z
```

- 8

- True

- 5

- False ←

question 48

python uses the same symbols for the assignment operator as for the equality operator

- True

- false ←

question 49

what type of loop structure repeats the code a specific number of times?

- Boolean-controlled loop

- count-controlled loop ←

- number-controlled loop

- condition-controlled loop

question 50

Python function names follow the same rules as those for those for naming variables

- True ←

- False

question 51

you are working on a program that consists of one globa variable and multiple functions. any function in the program can access teh global variable

- True ←

- False

question 52

if a sentinel value is not distinct the chosen value may appear as a value in the programs normla execution. this will result in early and undesired termination of the program

- True ←

- False

question 53

A Boolean expression is an expression that produces either int or float numbers

- True

- false ←

question 54

ifa a math expression adds a float to an int, the data type of the result will be int

- True

- False ←

Question 55

True, False, and None are keywords in Python

- True ←

- False

Quiz 3

question 1

When Working with a sequential access file, you can jump directly to any piece of data in the file without reading the data that comes before it

- True
- False ←

question 2

When you open a file that file already exists on teh disk using the "w" mode, the contents of the existing file will be erased

- True ←
- False

question 3

When a file that already exists is opened in append mode, the file's existing contents are erased

- True
- False ←

question 4

If you do not handle an exception, it is ignored by the Python interpretor and the program continues to execute

- True
- False ←

question 5

You can have more than one except clause in a try/except statement

- True ←
- False

question 6

The finally suite in a try/except statement executes only if no exceptions are raised by statements in the try suite

- True
- False ←

question 7

When a program is finished using a file, it should do this

- encrypt the file
- erase the file
- open the file
- close the file ←

question 8

The following code will display 'yes' + 'no'

```
mystr = 'yes'
yourstr = 'no'
mystr += yourstr
print(mystr)
```

- True
- False ←

question 9

What will be assigned to the variable s_string after the following code executes?

```
special = '1357 Country Ln.'
s_string = special[:4]
```

- '1357' ←
- '7'
- 5
- '7 Country Ln.'

1.1   question 10

Indexing of a string starts at 1 so the index of the first character is 1, the index of the second character is 2 and so forth

- True
- False ←

question 11

What will be the value of the variable string after the following code executes?

```
string = 'abcd'
string.upper()
```

- 'Abcd'
- Nothing: this code is invalid
- 'ABCD' ←
- 'abcd'

question 12

The index -1 indentifies the last element in a list

- True ←

- False

quesion 13

Which list will be referemced by the variable number after the following code is executed

```
number = range(0,9,2)
```

- [0,1,2,3,4,5,6,7,8,9]

- [1,3,5,6,9]

- [2,3,6,8]

- [0,2,4,6,8] ←

quesion 14

What will be the value of the variable list after the following code executes?

```
list = [1,2,3,4]
list[3] = 10
```

- Nothing: this code is invalid

- [1,2,3,10] ←

- [1,2,10,4]

- [1,10,10,10]

question 15

List are mutable, which mean their elements can be changed in a program

- True←

- False

Quiz 5

question 1

OOP allows us to hide object data atributes from code that is outside the object

- True ←
- False

question 2

The instances of a class share data attributes in the class

- True
- False ←

question 3

The self parameter need not be named self, but it is strongly reccomended to conform with standard practice

- True ←
- False

question 4

what type of programming contains class definitions?

- Procedural
- Object
- Object-oriented ←
- Modular

question 5

what are the procedures that an object performs called?

- Methods ←
- Actions
- Instances
- Modules

question 6

What is the combining of data and code in a single object known as?

- Objectification
- Encapsulation ←

question 7

A(n) is a component of a class that references data

- data attribute ←

question 8

by doing this you can hide a class's attribute from code outside the class.

- begin the name of the attribute with private__

- begin the name of the attribute with the @ symbol

- begin the attribute's name with two underscores ←

- avoid using the self parameter to create attributes

question 9

what is the special name given to the method that returns a string containing the object's state?

- __state__

- __obj__

- __str__ ←

- __init__

question 10

which method is automatically executed when an instance of the class is created in memory

- __init__ ←

question 11

The differnece of set1 and set2 is a set that contrains only the elements that appear in set1 but do not appear in set2

- True ←

- False

question 12

The elements in a dictionary are stored in ascening order,by the keys of the key-valye pairs

- True

- False ←

question 13

the issubset() methid can be used to determine whether set1 is a subset of set2

- True ←

- False

question 14

A dictionary can include the same value several times but cannot include the same key several times

- True ←

- False

question 15

what is the correct structure to create a dictionary of months where each month will be accessed by its month number, for example January is month 1 April is month 4?

- 1: 'January'; 2: 'February' ←

question 16

What will be the result of the following code?

```
ages = {'Aaron':6;'Kelly':3;'Abigail':1}
value = ages['Briana']
```

- KeyError ←

question 17

What will be displayed after the code executes

```
cities = ['GA':'Atlanta';'NY':'Albant';'CA':'San Diego']
if 'CA' in cities:
    del cities['CA']
    cities['CA'] = 'Sacramento'
print(cities)
```

- {'CA':'Sacramento';'NY':'Albany';'GA':'Atlanta'}

  ←

question 18

What does the following print?

```
D = {'a':2;'x':7;'d':5}
for k,v in D.items():
    print(k,v, end =',')
```

- a 2,x 7,d 5,