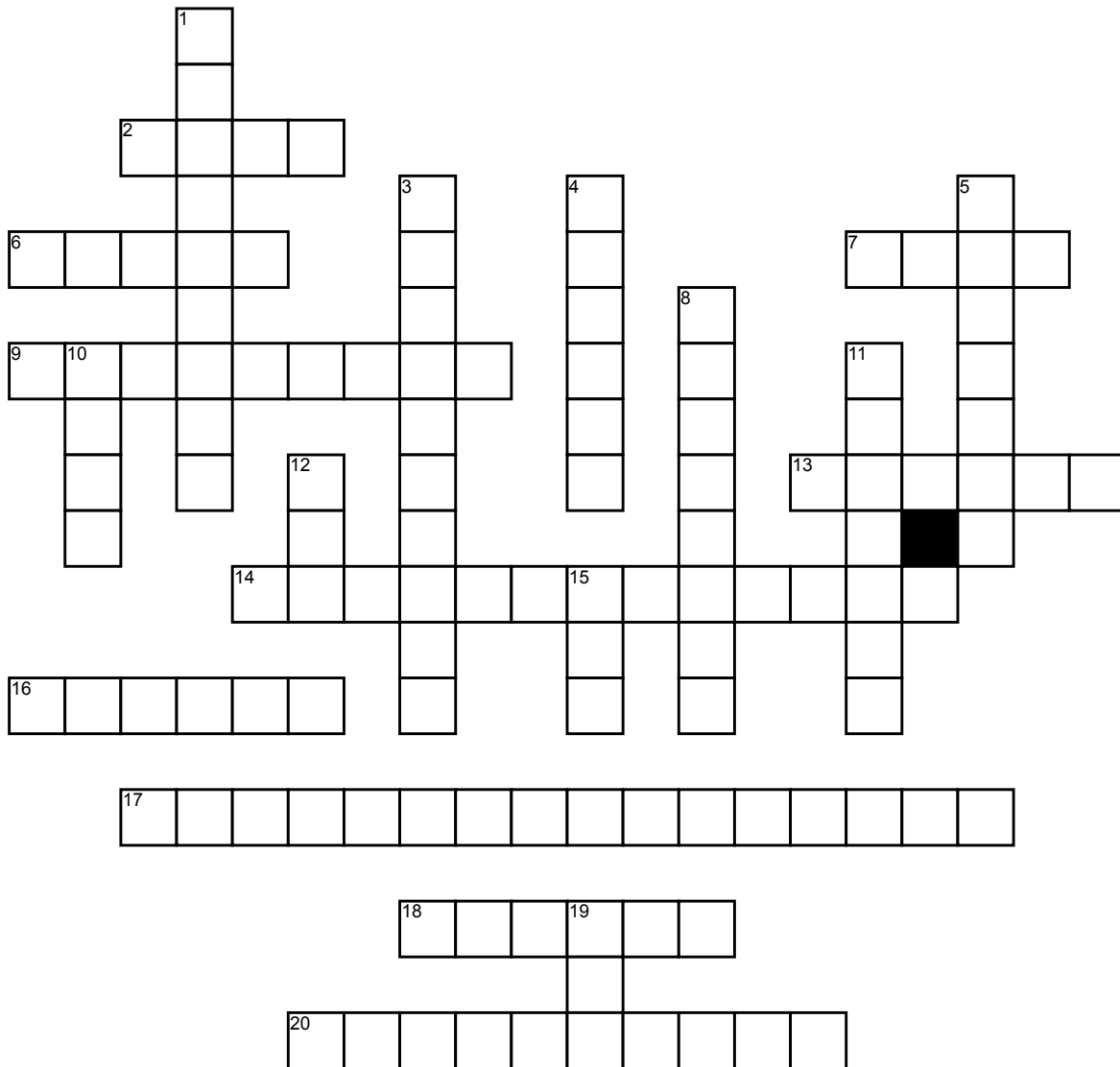


Problem Solving



Across

2. Work out the output of the following code:
`Total=0 >>> for x in range(3): for y in range(3,2,-1): total=total+y print(total)`

6. How many different types of loops are there in python?

7. Is the following Boolean expression true or false? Value = 10 1<=value and value<=100

9. A finite sequence of steps written for an agent (e.g. computer) to solve the problem.

13. Work out the output of the following code:
`Grade=45 if grade>=50: print("Passed") else: print("failed")` Answer: Failed

14. Here's the definition, what's the word:

16. What error has occurred with this coding?
`Num=6*[0] for count in range(len(num)): num[count]=count+1 print(num)`

17. What is the value of the shopping list [2]?
`Shoppinglists=["Cones", "Cream", "Icing", ["Coke Cola", "Pepsi"], ["Cake", "Bread"], ["Beans", "Eggs", "Sausages"]`

18. What type of error has occurred? percent = 85 if percent > 90: print("You got an A!") if percent > 80: print("You got a B!") if (percent > 70): print("You got a C!") if (percent > 60): print("You got a D!") Else: 19. print("You got an F!")

20. What is the programming tool which uses English-like phrases to outline the program?

Down

1. What loop is this? The statement provides a looping mechanism that executes statements repeatedly for as long as some condition remains true

3. Work out the output of the following code:
`total=0 >>> for a in range(7): for b in range(7,4,-2): total=total+b print(total)`

4. What error does this code provide: `import math def printCircleArea(radius) area=math.pi*radius*radius print("Area of the circle is",area) printCircleArea(16) r=30 printCircleArea(r)`

5. Lists in python are "....." – we can change an element of a list using the index operator

8. 14. What flowchart symbol means: Used to connect symbols and indicate the flow of logic

10. Kind of collection that can hold many values in a single variable

11. Name a design structure shape which is used to represent an action in an flowchat

12. Write a program to calculate the factorial of a number: `number=input("Enter a number") fac=1 if number==0: print(1) else: while number>=1: fac=fac*number number=number-1 print(fac)`

15. Work out the output of the following code:
`L = [2,4,1,3,5] >>> m=| [0] >>> for num in L: if num<m: m=num print(m)`

19. What is the output of the following code?
`X=7 Y=5 Print(x-y)`