Exercise 7-**2**

What is the print out of the following program?

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| 1 | for num in range(10, 0, -1):  print(num) |
| 2 | num = 1  while num < 11:  print(num)  num += 1  #num += 2 # only odd numbers |
| 3 | for num in range(1, 8):  print("T" \* num) |
| 4 | times = 1  while times < 8:  print("T" \* times)  times += 1 |
| 5 | last\_num = 12 **# i loop for columns, j loop for row**  for i in range(0, 7) :  for j in range(0, last\_num) :  print(end=" ")  last\_num = last\_num – 2  for j in range(0, i + 1):  print("T ", end="")  print() |
| 6 | x = 2 x = x \* 2 \*\* 3 \*\* 2 \* 2 +2 /2 print(x) |
| 7 | print("I love programming in Python!\n"\*10) |

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| --- | --- |
| 8 | a = 19 b = 7 false = a > b  if false:  print(a)  else:  print(b) |
| 9 | x = True y = False z = False  if not x or y:  print('1')  elif not x or not y and z:  print('2')  elif not x or y or not y and x:  print('3')  else :  print('4') |
| 10 | for x in range (2):  for y in range (2):  print(x, y, sep='') |
| 11 | for i in range (1, 7) :  for j in range(i) :  print('a', end = ' ')  print() |

2. Write a Python program to construct the following pattern, using a nested for loop.

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| 1 | & & & & & & & & & & & & & & & & & & & & & & & & & |
| 2 | 1. I love Python! 2. I love Python! 3. I love Python! 4. I love Python! 5. I love Python! 6. I love Python! 7. I love Python! 8. I love Python! 9. I love Python! 10. I love Python! |
| 3 | Exercise 3 is very easy. Exercise 5 is very easy. Exercise 7 is very easy. Exercise 9 is very easy. Exercise 11 is very easy. |

3. Fill in the blank (1) to complete the following program such that it can prevent a division-by-zero.

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| 1 | num1 = float(input('1st number: ')) num2 = float(input('2nd number: '))  if   **(1)**  :  print(num1,'is divisible by', num2) |
| 2 | num1 = float(input('1st number: ')) num2 = float(input('2nd number: ')) guess = float(input('Guess the average: '))  avg = (num1+num2)/2.0  if guess < avg:  print('It is too low')  **(1)**  print('It is too high')  else  print('It is correct') |