PRACTISE QUESTIONNS SET 3

Section A:

1. **What type of variable assignment does Python support?**
   a. Static
   b. Dynamic
   c. Manual
   d. Implicit
2. **What is the correct syntax for an if statement in Python?**
   a. if x > 5 then:
   b. `if x > 5:`
   c. `if (x > 5) {`
   d. `if x > 5 do:`
3. **What is the output of this code bool("Hello")?**
   a. True
   b. False
   c. None
   d. Error
4. **What will happen if the following code is executed?**

```
for i in range(1, 10, -3):
    print(i)
```

   a. It will print numbers from 1 to 10 with a step of -3.
   b. It will throw a ValueError because the step is negative and the start is less than the end.
   c. It will throw a SyntaxError.
   d. It will print nothing.
5. **What is the output of this code print("Hello" + 1530)?**
   a. Hello1530
   b. Error
   c. None
   d. 1530Hello
6. **Which of these is NOT true about a compiler?**
   a. It generates machine code.
   b. It is slower than an interpreter during the first execution.
   c. It executes the program line by line.
   d. Errors are displayed after the entire code is compiled.
7. **What happens if the following code is executed and the user inputs "ten"?**

```
number = int(input("Enter a number: "))
print(f"The double of the number is {number * 2}")
```

   a. It will print "The double of the number is ten".
   b. It will throw a ValueError.
   c. It will print 20.
   d. It will throw a TypeError.

8. **What will be the output if the user enters 10, 20, and 30?**

```
a = int(input("Enter the first number: "))
b = int(input("Enter the second number: "))
c = int(input("Enter the third number: "))
print("The average is:", (a + b + c) / 3)
```

   a. The average is 20
   b. The average is 20.0
   c. 20
   d. 60

9. **What does the "is" operator compare?**
   a. The values of two objects
   b. The memory locations (identity) of two objects
   c. Both values and memory locations
   d. The type of two objects

10. **What will the following code output?**

```
a = 0

b = 0

print(a > b)
```

   a. True
   b. False
   c. Error
   d. None

Section B:

1. Write a Python function to reverse a given string.
2. Write a function that prints all even numbers between 1 and 20 using a while loop.
3. Write a Python program to determine whether the speed limit exceeds 110 km per hour. If the speed exceeds 110, then fine = 300, otherwise fine = 0. Display fine.
4. Draw a Flowchart and Write a Python Program for Multiplication Tables up to 10.
5. Write a program that prompts the user to prints all numbers between 1 and 50 that are divisible by 3.
6. Ask the user to enter a number. If the number is even, print "The number is even." If the number is odd, print "The number is odd." Continue asking for a number until the user enters 0.
7. Write a program to count how many times the number 7 appears in a list using a while loop.
8. Write a program that finds the sum of digits in a number.
9. Write a python program to ask for the score input and print the respective grade as follow:

Score	Grade
Above 80	A
60 - 79	B
40 – 59	C
Below 40	D

10. Accept 2 input values from user and do arithmetic operation. (+, -, *, /, %). (HINT: simple calculator)