Test

Test on For Loops in Python

Multiple Choice Questions (MCQs):

1. What is the correct syntax for a for loop in Python?
   a) for(i=0; i<5; i++)
   b) for i in range(5):
   c) foreach i in range(5):
   d) loop i in range(5):

2. What will be the output of the following code?

```
for i in range(3):
    print(i)
```

   a) 1 2 3
   b) 0 1 2
   c) 0 1 2 3
   d) Error

3. What does the `range(2, 10, 2)` function generate?
   a) [2, 4, 6, 8]
   b) [2, 10]
   c) [2, 4, 6, 8, 10]
   d) [2, 3, 4, 5, 6, 7, 8, 9]

4. What is the output of the following code?

```
for i in range(5, 0, -1):
    print(i, end=' ')
```

a) 5 4 3 2 1
b) 1 2 3 4 5
c) 4 3 2 1 0
d) Error

5. How can we iterate over a list using a for loop?
   a) for i in list:
   b) for i in range(len(list)):
   c) Both a and b
   d) None of the above

Practical Questions:

1. Write a Python program that prints numbers from 1 to 10 using a for loop.

2. Write a Python program that iterates through the list `["apple", "banana", "cherry"]` and prints each item.

3. Write a program to print all even numbers between 1 and 20 using a for loop.

4. Write a program that calculates the sum of all numbers from 1 to 50 using a for loop.