

1. How many times will the following loop execute before completing? (1 points)

```
number = 1
while number<=5
    disp('Hello')
end
```

- a. 0
  - b. 1
  - c. 5
  - d. 10
  - e. infinite
2. **True or False:** Loops will always execute faster than any vectorized operation. (1 points)
3. What is the difference between a “while” loop and a “for” loop? (4 points)
4. What is the difference between a “break” and a “continue” statement? (4 points)
5. Write a MATLAB script to: (10 points)
- Create a for loop to iterate over the multiples of 3, from 0 to 100.
    - Inside the for loop, check if each number is even or odd (**hint:** use rem()).
    - Display the number, and then display whether it is even or odd to the screen.

**Extra Credit:** write a program that uses a while loop to build a vector of the multiples of 4 from 0 to 200. Display the resulting vector. (5 points)