For loop Practice

General form or `for` loop

Example of 'range'

```
range(5)          : 0, 1, 2, 3, 4
range(2, 7)       : 2, 3, 4, 5, 6
range(2, 17, 3)  : 2, 5, 8, 11, 14
range(6, 2, -1)  : 6, 5, 4, 3
```

Write output for the following (Attempt with PEN/PAPER first):

1.
```
for i in range(1, 6):
    print(i)
```

2.
```
for i in range(5):
    print("Hello")
```

3.
```
for i in range(2, 11, 2):
    print(i)
```

4.
```
for i in range(1, 6):
    print(i ** 2)
```

5.
```
for letter in "PYTHON":
    print(letter)
```

6.
```
for i in range(5, 0, -1):
    print(i)
```

7.

```python
for i in range(1, 6):
    if i % 2 == 0:
        print(i, "is even")
    else:
        print(i, "is odd")
```

8.

```python
word = "EDUCATION"
vowels = "AEIOU"
count = 0
for letter in word:
    if letter in vowels:
        count += 1
print("Number of vowels:", count)
```

9.

```python
total = 0
for i in range(1, 6):
    total += i
print("Sum:", total)
```

10.

```python
total = 0
for i in range(2, 11, 2):
    total += i
print("Sum of even numbers:", total)
```

11.

```python
word = "BANANA"
count = 0

for letter in word:
    if letter == "A":
        count += 1

print("Count of 'A':", count)
```

12.

```python
num = 1234
total = 0

for digit in str(num):
    total += int(digit)

print("Sum of digits:", total)
```