```python
string = input("Enter a string: ")
reversed_string = string[::-1]
print("Reversed string:", reversed_string)
```

```
Enter a string: hello
Reversed string: olleh
```

```python
numbers = [1, 2, 3, 4, 5, 6]
even_numbers = [num for num in numbers if num % 2 == 0]
print("Even numbers:", even_numbers)
```

```
Even numbers: [2, 4, 6]
```

```python
string = input("Enter a string: ")
vowels = "aeiou"
count = 0
for char in string.lower():
  if char in vowels:
        count += 1
print("Number of vowels:", count)
```

```
Enter a string: education
Number of vowels: 5
```

```python
numbers = [1, 2, 3, 4, 5]
n = len(numbers)
if n % 2 != 0:
    middle = numbers[n // 2]
else:
    middle = (numbers[n // 2 - 1], numbers[n // 2])
print("Middle element(s):", middle)
```

```
Middle element(s): 3
```

```python
numbers = [1, 2, 3, 4]
result = [-num if index % 2 == 0 else num for index, num in enumerate(numbers)]
print("Modified list:", result)
```

```
Modified list: [-1, 2, -3, 4]
```

```python
n = int(input("Enter number of rows: "))
num = 1
for i in range(1, n + 1):
    for j in range(i):
        print(num, end=" ")
        num += 1
    print()
```

```
Enter number of rows: 4
1
2 3
4 5 6
7 8 9 10
```

```python
password = input("Enter your password: ")
if len(password) < 6:
    print("Weak")
elif password.isalpha() or password.isdigit():
    print("Moderate")
elif any(ch.isalpha() for ch in password) and any(ch.isdigit() for ch in password) and len(password) >= 8:
    print("Strong")
else:
    print("Moderate")
```

```
Enter your password: hello12
Moderate
```

```python
num = int(input("Enter a number: "))
sum_digits = 0
product_digits = 1
temp = num
```

```
    while temp > 0:
        digit = temp % 10
        sum_digits += digit
        product_digits *= digit
        temp //= 10
    if sum_digits == product_digits:
        print(num, "is a Spy Number")
    else:
        print(num, "is NOT a Spy Number")
```

```
Enter a number: 124
124 is NOT a Spy Number
```

```
word = input("Enter a word: ")
alien_word = ""
for i in range(len(word)):
    if i % 2 == 1:
        alien_word += "*"
    else:
        alien_word += word[i]
print("Alien language:", alien_word)
```

```
Enter a word: planet
Alien language: p*a*e*
```

```
n = int(input("Enter a number n: "))
for i in range(1, n + 1):
    if i % 4 == 0 and i % 6 == 0:
        print("BoomBang", end=" ")
    elif i % 4 == 0:
        print("Boom", end=" ")
    elif i % 6 == 0:
        print("Bang", end=" ")
    else:
        print(i, end=" ")
```

```
Enter a number n: 12
1 2 3 Boom 5 Bang 7 Boom 9 10 11 BoomBang
```