

1. Type in the following in the Python interactive window. See what is the result and try to understand what happened and why:

```
>>> s1 = "hello mummy!"
>>> m1 = s1.split()
>>> print(m1)

>>> s2 = "-".join(m1)
>>> print(s2)

>>> s1.title()

>>> print(s1)

>>> s1.replace('mummy', 'ghost')

>>> s1

>>> s1.count('m')
```

2. Write a program that will generate a list of n numeric values from the interval $[-100,100]$. The number n is provided by the user, for the number generation use pseudo-random function `randint`. Don't forget to import library `random`. Then sort them and print them out.

3. Write a program that encodes a sentence using Caesar cipher. Then in the same program write decoder.