Python
Session-04

Loops

Q1:

- for the following List apes = ["Homo sapiens", "Pan troglodytes", "Gorilla gorilla"]

- kindly, for each element in list print the following:

- Homo sapiens is an ape. Its name starts with H Its name has 12 letters

Q2:

- Processing DNA in a file The file input.txt contains a number of DNA sequences, one per line. Each sequence starts with the same 14 base pair fragment – a sequencing adapter that should have been removed.

- Write a program that will 1- trim this adapter 2- write the cleaned sequences to a new file and 3- print the length of each sequence to the screen.

Q3:

- What is the difference?

```
i=0
while i !=10:
    i=i+1
    print (i)
```

```
i=0
while i !=10:
    i=i+1
print (i)
```

Extra problems

Farmer problem

a farmer is asking you to tell him how many legs can be counted among all his animals. The farmer breeds three species:

- ◆ chickens = 2 legs
- ◆ cows = 4 legs
- ◆ pigs = 4 legs

The farmer has counted his animals and he gives you a subtotal for each species. Write a function that takes 3 integers, number of chicken, number of cows and number of pigs then returns the total number of legs

String mutation

- Read a given string, change the character at a given index and then print the modified string.
- Example:

Input: Abracadabra, 5 ,k
Output: abrackdabra