

MiniLab-4

Prof.Dr. Bahadır AKTUĞ
803400815021 Machine Learning with Python

Example - 1

The student numbers of whole class and those having a scholarship from institutions A and B are given below. Find those who don't have any scholarship.

```
students = [14520, 11347, 12699, 12337, 11450, 15147, 12547, 13341]
```

```
Ascholar = [11450, 15147, 12547]
```

```
Bscholar = [12337, 11450, 12547, 13341]
```

Example - 2

Find the result of the following operation.

```
>>> x = {"a","b","c","d","e"}  
>>> y = {"h","j","c","d","k"}  
>>> z = {"i","b","e","d","n"}  
>>> x - y & z ^ x
```

Example - 3

Define an empty set and add the following items to the set.

red, 5

Example - 4

Modify the set A as B

$A = \{1, 3, 4, 6\}$

$B = \{7, 3, 4, 6\}$

Example - 5

Given the character sets below obtain English alphabet

```
>>> turkish = 'abcçdefgğhijklmnoöprştuüvyz'  
>>> nonEnglish = 'çğıöşü'  
>>> onlyEnglish = 'qxw'
```

Example - 6

Write a program which reads the name and surname of students from a file and writes the surnames to another file.

Example - 7

Write a program which formats the numbers 878.741, 7.2156e2 ve 16.8 as follows.

879
721.5600
00017

Example - 8

Write a program which reads the matrix given in «matrix.txt» and prints out the diagonal elements of the matrix.

The content of file «matrix.txt»

| | | | | | |
|---|---|---|---|---|---|
| 6 | 3 | 7 | 5 | 4 | 6 |
| 4 | 4 | 3 | 1 | 7 | 3 |
| 5 | 5 | 9 | 5 | 4 | 9 |
| 5 | 4 | 7 | 6 | 3 | 2 |
| 1 | 7 | 6 | 3 | 9 | 8 |
| 4 | 0 | 6 | 4 | 3 | 2 |

Example - 9

Write a program which prints the numbers 1.3457899e2, 13, 1478 as follows.

134.579

00013

1478.000