

**python3 student\_no.py** # takes inputs from the terminal and displays results (if any).

**python3 student\_no.py<input1.txt** # it takes inputs from input1.txt and displays the result in the terminal.

**python3 student\_no.py<input1.txt>myoutput.txt** # it takes the inputs from input1.txt and creates the myoutput.txt document and writes the result here.

**diff output1.txt myoutput.txt** # compares the document output1.txt with the document myoutput.txt.

**diff --ignore-all-space output1.txt myoutput.txt** # compares the document output1.txt with the document myoutput.txt without ignoring the spaces.

## QUESTION 1

If the sum of the powers of the digits of a number is equal to the number itself, then this number is called a Disarium number. Write the Python code that takes a positive integer from the user and finds whether this number is a Disarium number.

Note: Let's assume that the user always enters a 4-digit integer value.

Example	Example
1306 sayisi	1000 sayisi
$1**1 + 3**2 + 0**3 + 6**4 = 1306$	$1**1 + 0**2 + 0**3 + 0**4 = 1$
1306=1306	1!=1000 (is not equal)
disarium	notdisarium

Example 1	Example 2
1306	1000
<b>1306</b>	<b>1</b>
<b>disarium</b>	<b>notdisarium</b>