**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 a number is divisible by the sum of its digits, it is called a Harshad number. Write a program that takes a positive integer from the user and prints whether this number is a Harshad number or not.

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

|  |  |
| --- | --- |
| **Example**  1226  1+2+2+6 = 11  1226 / 11 is not divisible.  notharshad | **Example**  2844  2+8+4+4 = 18  2844 / 18 is divisible.  harshad |

|  |  |
| --- | --- |
| **Example 1**  1226  **11**  **notharshad** | **Example 2**  2844  **18**  **harshad** |