**LAB – SHELL PROGRAMMING**

***Lesson 1*** : Print to the screen composite numbers <100. (*Composite number is natural numbers greater than 1 and must be divisible by a number > 1 and itself.)*

***Lesson 2*** : Print out n first prime numbers (*input n from keyboard*).

***Lesson 3*** : Print out the screen all prime numbers from 1000 to 2000.

***Lesson 4***: Print out the screen the numbers <100 and divide by 5 or 6.

***Lesson 5:*** Print the first 4 perfect numbers on the screen (*Perfect number is the number that equals the sum of its divisors including 1*)

***Lesson 6*** : In the natural numbers <= 100 count how many numbers there are:

- Divide by 7.

- Divide 7 with the remainder 2.

- The end digit is “7”.

***Lesson 7:*** Given any natural number N> 1 (previously assigned). Print out the successful development of prime numbers from small to large.

*Example:*  9 --> 3.3 12 --> 2.2.3

***Lesson 8:*** Given any natural number N (previously assigned). Print out all the different prime divisors of N.

***Lesson 9:*** Given an array of natural numbers, write a program that:

* Arranges this array in descending order.
* Print out the screen all prime numbers of this array.
* Count how many prime numbers there are in the above array, how many composite numbers there are.

***Lesson 10***: Given an array of integer numbers, delete the array with the elements = 0 and print out the rest of the array on the screen.