



KENYATTA UNIVERSITY
DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY
SIT 211: LOGIC PROGRAMMING
ASSIGNMENT V

Submission Instructions:

Deadline: 11th March, 2020 11h00.

Submission Type: Hand-written Solution and a Prolog Implementation.

1. Write a Prolog program that outputs integers that are multiples of 5 from *Last* down to *First* inclusive. The range (Last to First) should be specified by the user. Your program should also compute the sum of the values in the range that are multiples of 5.
2. Write a Prolog program that takes in two values (n1, n2) and prints the square of n1 if $n1^2$ is equal to n2. Illustrate how your program works using example queries.
3. Write a Prolog program to generate the following sequence 0, 1, 1, 2, 3, 5, 8, 13, 21, 34,and so forth, where the term $x_n = x_{n-1} + x_{n-2}$. and the first two terms are 0 and 1.

Sample output:

?-fibonacci(9).

The sequence up to 9th term is: 0, 1, 1, 2, 3, 5, 8, 13, 21