

# CENG111 Concepts in Computer Engineering

## Interdisciplinary Assignment

Fall 2020

**Deadline:** Feb 3<sup>rd</sup>, 2020, 5PM.

**Submission:** The project will be developed in teams of 5-6 students from both Computer Engineering and Mathematics departments of IYTE. Project team information will be provided on the Teams system. Submissions will be done through the Teams as well. Each project team is required to submit one PHP file that includes both HTML and the PHP code. The file should also contain, in comments, the names of each student that participated to the project in your team.

**Teams Code:** nlsv98v

**Requirements:** Apache web server with PHP support – no hosting is required, it's OK if it just runs on your browser.

**Task:** Develop a web page that computes definite integral. You are supposed to write a HTML+PHP file that displays the following on a web browser:

Definite Integral Calculation

$$f(x) = \boxed{\phantom{00}} + \boxed{\phantom{00}}x + \boxed{\phantom{00}}x^2 + \boxed{\phantom{00}}x^3 + \exp(x) + \cos(x)$$

$$a = \boxed{\phantom{00}}, b = \boxed{\phantom{00}} \text{ for } \int_a^b f(x) dx$$

Submit

The page will display 6 input boxes for function coefficients (namely A, B, C, and D), two input boxes for lower and upper values (namely a and b) and one submit button that sends the HTTP request to the server using GET or POST method. Then the same PHP code should calculate  $\int_a^b f(x) dx$  using a numerical computation method and display the result.