Module 9: Assignment: Introduction to Simulink

Problem Statement:

You are an engineer working on a project that involves designing a control system for a complex mathematical calculation. Your task is to create a Simulink model to solve the following mathematical expression:

$$25+12 - \{[(15 \times 32) \div (2 \times 5)] \div 75\} * 20$$

Task to be Performed:

- Using Simulink, create a model to solve the mathematical expression.

  $$25+12 - \{[(15 \times 32) \div (2 \times 5)] \div 75\} * 20$$

- Design a Simulink model that includes components for addition, subtraction, multiplication, and division to represent the mathematical expression.
- Create a sub-system within the Simulink model specifically for the calculation of the expression within the brackets

  $$\{[(15 \times 32) \div (2 \times 5)] \div 75\}.$$

- Add annotations to the Simulink model to describe the purpose and functionality of each component, including the sub-system.
- Simulate the Simulink model to calculate the result of the mathematical expression and verify its correctness.