Lecture 3 In-class practice

In Excel file “Lec3_VBAFundamentals” module “Practice”,

1. Write a sub procedure in this module named `Q1`.

- Create five variables with `Variant` data type: `S`, `K`, `T`, `r`, `sig`
- Worksheet “Q1” contains the data of a European option inputs. Read cell B4 into variable `S`, cell B5 into `K`, cell B6 into `T`, cell B7 into `r`, and cell B8 into `sig`.
- Create a variable named `dOne` with `Double` data type.
- Calculate `dOne` using the following equation:

$$d_1 = \frac{\ln(S/K) + (r + \sigma^2/2)T}{\sigma\sqrt{T}}$$

  We have VBA built-in function `log` to calculate ln, and `sqr` to calculate the square root.

- Write `dOne` into cell B10.

2. Write a sub procedure named `Q2`.

- First, you create a 1D array variable named `Var` with two elements.
- The data type of the variable is `String`.
- First element has value of "Lecture".
- Second element has value of "One".
- Then write the value of `Var` into Excel range "A1:B1" of "Sheet2".

3. Worksheet "Q3" contains film data. Write a sub procedure named `Q3`.

- Create a variable `FilmName`.
- Use VBA built-in function `Array` to create a 1D array variable with 4 elements, value of which are the film names in range A2:A5.
- Create an array variable `FilmType` and read data in range B2:B5 into this array variable.
- Create a 1D array variable `RngObject` with 3 elements.

  Assign `range` object A2:A5 to the first element.

  Assign `range` object B2:B5 to the second element.

  Assign `range` object C2:C5 to the third element.