

Homework 4: EXCEL VBA

(Version 1.0)

Release Date: 23.12.2016**Due On:** 31.12.2016 @ 23:55**(LATE Submissions for ANY reasons will NOT be accepted)****Version history:**

v1.0: Homework 4 is released.

Submission Rules:

Each student must submit individual solutions for these homework problems. You may use any source at your disposal—paper, electronic, or human—but you must cite every source that you use. Submit your solutions through **ODTUCCLASS**. While submitting, you should include the “.xlsm” (for EXCEL) files with your printed results (i.e., screen shots) in a compressed file (*.zip, *.rar, etc.).

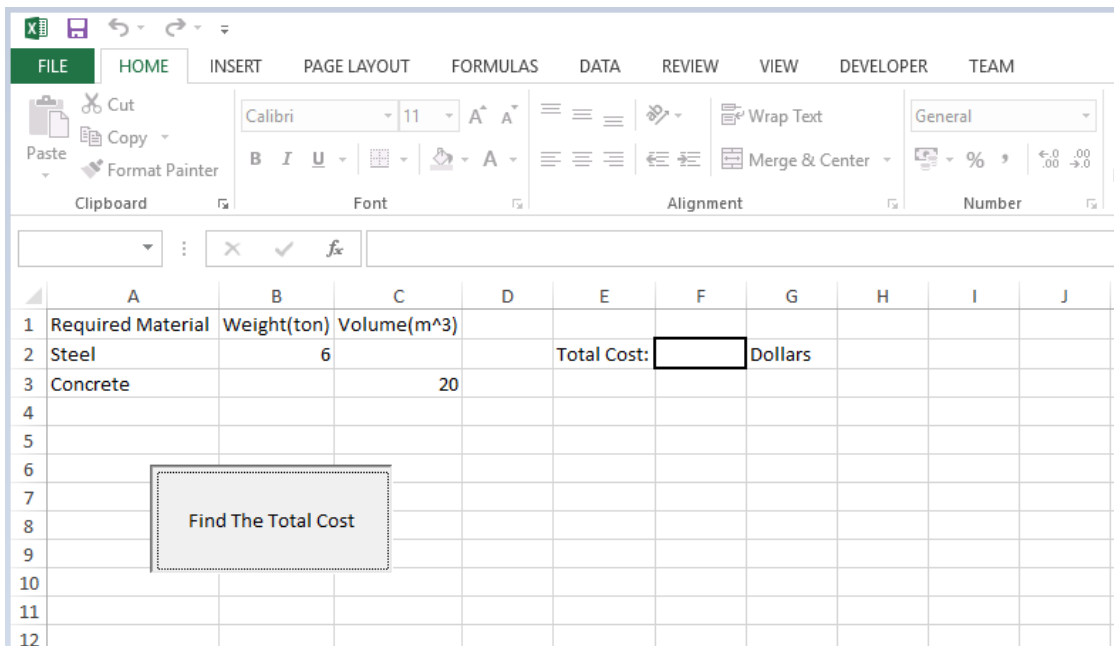
WRITE COMMENTS IN YOUR CODES, USE VARIABLE NAMES AS DESCRIBED IN THE CLASS!

1. (100 pts)

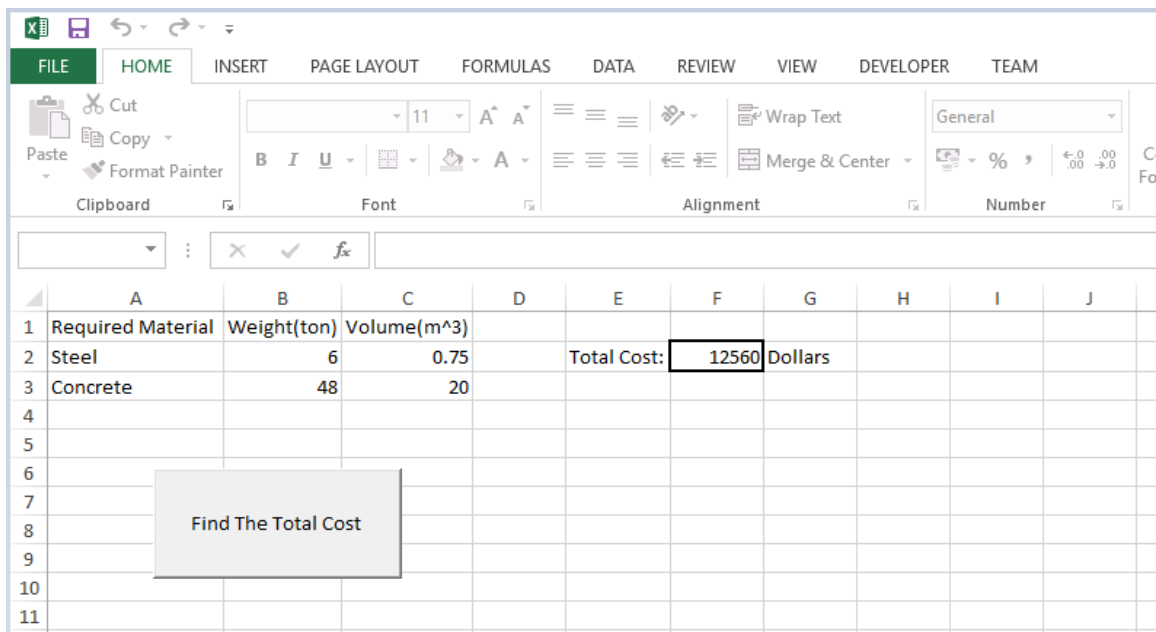
In a geotechnical project, pile foundation was selected to be used in the design. Your employer wants you to write a VBA program that will calculate the cost of the foundation by calculating the individual costs of construction materials when a button is clicked. Code this program in the file “FoundationCost.xlsm” which is attached to the homework file.

For simplicity, only 2 materials are needed to build the foundation, concrete and steel.

- In the program, the user will enter the volume and weight of the materials steel and concrete in the range B2:C3. You need to calculate the total cost using the weight of the steel and volume of the concrete.
- Steel cost 2000\$ per ton and concrete costs 100 TL per m³. You are asked to find the price in dollars. You can find the exchange rates from the internet.
- Your program should also calculate volume of steel and weight & show the values on C2 and B2 cells respectively. You may use density values for these materials that you obtain from the literature or the internet.
- An example calculation with the finished version of the program is given in the next page:



You should input weight of steel and volume of concrete first



Program should calculate and print volume of steel, weight of concrete and total cost after clicking the button