

## Assignment 1 (15 points)

**Due:** by 11:59 PM of Feb. 5, 2025

**File name:** Your solution file should be a Jupyter Notebook python program. Name the file as A1\_YourLastname\_Firstname, such as A1\_Smith\_John.ipynb. (2 points)

**How to submit:** Submit your solution in .ipynb file through Canvas. Do not send it to instructor's cpp email account. (2 points)

**Note:** Must write your name in a comment line at beginning of your program file, such as # John Smith, (1 point).

1. Write Python statements which accept a person's first name, last name, and birth year, respectively, and then display Hello followed by the full name; then in the next line, display the person's age. Write all your statements in one code cell. (5 points)

FYI, a sample output is as follows.

Enter a first name: John

Enter a last name: Smith

Enter a birth year: 2000

Hello John Smith

Your age is 25

2. Write statements to accept three numbers for length, width, and height of a cuboid, respectively. Then display the surface area and volume; their displayed values will have maximum two decimal numbers. Write all your statements in one code cell. (5 points)

FYI, a sample output is as follows, where xxx should be replaced by your calculated numbers.

Enter a length: 2.5

Enter a width: 2

Enter a height: 1.5

Surface area is xxx

Volume is xxx

3. Write statements to collect a product unit price and quantity. When the quantity is greater than or equals to 20, the discount rate is 0.05; quantity greater than or equals to 50, discount rate is 0.1; quantity greater than or equals to 80, discount rate is 0.15. Display the total discount and total amount (after discount), respectively, and their displayed values will have maximum two decimal numbers. Write all your statements in one code cell. (5 points)

FYI, a sample output is as follows, where xxx should be replaced by your calculated numbers.

Enter a unit price: 12.5

Enter a quantity: 35

Total discount is \$xxx

Total amount is \$xxx