COSC 24L3: Lab Assignment #1
Computer Science Department @ Dallas Baptist University
Fall 2023

1. Display output

Write a program that declares the following:

- a String variable named **name**
- an int variable named **age**
- a double variable named **annualPay**

Store your age, name, and desired annual income as literals in these variables. The program should display these values on the screen in a manner similar to the following:

```
My name is Peter Pan, my age is 20 and
my annual income is $100000.0
```

2. Input and output

This program asks users to input 3 test scores (double type), first name, middle name initial, last name, student ID (String type), and major. Calculate test average and display the result.

Sample run:

```
Score 1: 98
Score 2: 85.5
Score 3: 100
First Name: John
Middle Name Initial: A
Last Name: Smith
ID: 1234567
Major: Computer Science

Student information:
John A. Smith, ID# 1234567
Major: Computer Science
Test average: 94.5
```

3. Compound Interest

When a bank account pays compound interest, it pays interest not only on the principal amount that was deposited into the account, but also on the interest that has accumulated over time. Suppose you want to deposit some money into a savings account, and let the account earn compound interest for a certain number of years. The formula for calculating the balance of the account after a specified number of years is:

$$A = P\left(1 + \frac{r}{n}\right)^{nt}$$

The terms in the formula are:

A is the amount of money in the account after the specified number of years.
P is the principal amount that was originally deposited into the account.
r is the annual interest rate.
n is the number of times per year that the interest is compounded.
t is the specified number of years.

Write a program that makes the calculation for you. The program should ask the user to input the following:

- The amount of principal originally deposited into the account
- The annual interest rate paid by the account
- The number of times per year that the interest is compounded (For example, if interest is compounded monthly, enter 12. If interest is compounded quarterly, enter 4.)
- The number of years the account will be left to earn interest

Once the input data has been entered, the program should calculate and display the amount of money that will be in the account after the specified number of years.