

THE UNIVERSITY OF THE WEST INDIES
Department of Computing
COMP1126–Introduction to Computing I

Lab 1

Question 1

Write a python program called `mystery` that should ask you to enter the last digit of your cell phone number and also ask to enter your birth year. (Hint: Use the input command but be mindful that the value entered is a string.)

- a. Multiply the cell phone digit by 2, add 5 to it, then multiply by 50 and add 1766
- b. Then subtract your birth year from this expression.
- c. Return the result of this expression.

This return value is a three digit number where the first digit is the cell phones last digit and the remaining two digits are your age (this year).

```
e.g.      >>> mystery()
           Enter last digit of your cell phone number: 2
           Enter your year of birth: 1996
           220
```

Question 2

Write a python program called `fuzzbiz`, which takes a number as input. If the number is divisible by 3 return the string “Fuzz”, if the number is divisible by 5 return the string “Biz” and if the number is divisible by both numbers then return the string “FuzzBiz”. If it is only any of the above cases then the program should return “No Fuzz No Biz”. Test your program with 30, 27, 20 and 19.

```
e.g.      >>> fuzzbiz(30)
           'FuzzBiz'
           >>> fuzzbiz(20)
           'Biz'
           >>> fuzzbiz(27)
           'Fuzz'
           >>> fuzzbiz(19)
           'No Fuzz No Biz'
```

Question 3

Write a python program that takes a year as input and returns True if the year is a leap year, otherwise it returns False. The input to this function must be an integer.

Leap Year Definition:

In the Gregorian Calendar, leap years are evenly divisible by 4, with the exception of centurial years that are not evenly divisible by 400.

A leap year can be centurial or non-centurial (e.g. 1600,1996). Non-centurial leap year must be divisible by 4 and not divisible by 100 (e.g. 1992, 2008). Centurial leap year must be divisible by 400 (e.g. 1600, 2000, 2400 are leap years and 1700, 1800, 1900, 2100 are not leap years).

[NOTE: For a number to be divisible by another the number when divided by the second number should have no remainder.]

```
e.g      >>> isLeapYear(2016)
          True
          >>> isLeapYear(2000)
          True
          >>> isLeapYear(2100)
          False
```