

ASSIGNMENT 3: CONTROL FLOW STATEMENTS

1. Write a program to find out the Chinese zodiac sign for a given year. The Chinese zodiac sign is based on a 12-year cycle, and each year in this cycle is represented by an animal — monkey, rooster, dog, pig, rat, ox, tiger, rabbit, dragon, snake, horse, and sheep.



For example, year = 2019

→ *Sample Output*: pig

2. Write a program to display all odd numbers between a and b.
3. Write a program to create a simple calculator that can add, subtract, multiply or divide depending upon the input from the user.

```
1 # Print menu
2 q = 'Y'
3 while q == 'Y':
4     c = int(input("Please choose operations (1,2,3,4):"))
5     # check user's choice is valid or invalid?
6     # if choice is invalid, ask user to re-enter other choice
7     # if choice is valid, prompt user to input two numbers
8     # Use "if" statement to execute operations
9     q = input("Do you want to continue (Y/N)?")
```

Sample output:

```
1.Add
2.Subtract
3.Multiply
4.Divide
Please choose operations (1,2,3,4):5
Your choice is invalid
Please choose operations (1,2,3,4):3
Enter two numbers: 2,3
2 * 3 = 6
Do you want to continue (Y/N)?Y
Please choose operations (1,2,3,4):1
Enter two numbers: 3,4
3 + 4 = 7
Do you want to continue (Y/N)?N
```