

# Homework week 2

**Name: Qixiao Zhang**

```
In [32]: x = 100
y = 29
print(3*(x+y))
```

387

```
In [34]: z = 387**2
print(z) # The result of the calculation is:
```

149769

```
In [57]: name = input("Please enter your name:")
name_latters = name[:3]
print(name_latters)
year = input("Please enter your birthday:")
year_digits = str(year)[-2:]
print(year_digits)
age = int(input("Please enter your age:"))
age_twice = age*age
print(age_twice)
```

Please enter your name:Zhang  
Zha  
Please enter your birthday:1998  
98  
Please enter your age:24  
576

```
In [78]: num1 = int(input("Enter the first number: "))
num2 = int(input("Enter the second number: "))

if num1 % 2 == 0 and num2 % 2 == 0:
    print("Both numbers are even.")
elif num1 % 2 == 0 or num2 % 2 == 0:
    print("One of the numbers is even.")
else:
    print("Both numbers are odd.")
```

Enter the first number: 5  
Enter the second number: 6  
One of the numbers is even.

```
In [86]: num = int(input("Give an integer: "))

sum = 0

for i in range(num):
    if i >= 0:
        sum += i

print("The sum was:", sum)
```

Give an integer: 5  
The sum was: 10

```
In [91]: import random

number = random.randint(0, 10)
guess = -1
tries = 0

while guess != number:
    guess = int(input("Guess a number between 0 and 10: "))
    tries += 1

    if guess < number:
        print("Your guess is too low. Try a higher number.")
    elif guess > number:
        print("Your guess is too high. Try a lower number.")
    else:
        print("Congratulations! You guessed the number in", tries,
```

Guess a number between 0 and 10: 7  
Congratulations! You guessed the number in 1 tries.

```
In [92]: import random

def guess_number(player):
    number = random.randint(0, 10)
    guess = -1
    tries = 0

    while guess != number:
        guess = int(input("Player " + str(player) + ": Guess a number: "))
        tries += 1

        if guess < number:
            print("Try a greater number.")
        elif guess > number:
            print("Try a smaller number.")
        else:
            print("That's right! Number of tries: " + str(tries))
            return tries

print("Player 1's turn:")
player1_tries = guess_number(1)

print("Player 2's turn:")
player2_tries = guess_number(2)

if player1_tries < player2_tries:
    print("Winner is Player 1")
elif player2_tries < player1_tries:
    print("Winner is Player 2")
else:
    print("It's a tie!")
```

```
Player 1's turn:
Player 1: Guess a number between 0 and 10: 7
Try a greater number.
Player 1: Guess a number between 0 and 10: 8
Try a greater number.
Player 1: Guess a number between 0 and 10: 9
That's right! Number of tries: 3
Player 2's turn:
Player 2: Guess a number between 0 and 10: 6
Try a greater number.
Player 2: Guess a number between 0 and 10: 8
Try a greater number.
Player 2: Guess a number between 0 and 10: 9
Try a greater number.
Player 2: Guess a number between 0 and 10: 10
That's right! Number of tries: 4
Winner is Player 1
```

```
In [ ]:
```

