Python

<https://www.youtube.com/watch?v=rfscVS0vtbw&t=9s>

//print

Print(“”)

//variable

character\_name = “su”// underscore

Print (“my name is su” + Character\_name + “.”)

character\_age = 18

is\_male = True

//working with string

character\_name = “s\nu” //change the line

character\_name = “s\”u” //s”u

su = “haha”

print (su.lower()). // lower case

print (su.islower()). //true

print (su.upper().isupper()). // convert to upper case—true

print (len(su)). //2—length

print (su[0] ). //h

print (su.index(“h”) ). //0

print (su.replace(“haha”,”hehe”) ). //hehe

//working with numbers

Print(2)

Print(4+2)

Num =4

Print(str(num)). // 4 is a string

Print(str(num)+”is haha”). // num + string will cause error

// get input from user

Name = Input(“name:” )

Print(“hello”+name +”!”)

//calculator

Num1 = input(“num1:”)

Num2 = input(“num2:”)

Result = float(num1)+float(num2) // string to number

Print(result)

//list

Friends = [“k”,”s”, “h”]

Print(friends)

Print(friends[0])//[“k”]

Print(friends[-1])//[“h”]

Print(friends[1:])//[“s”,” h”]

//list function

Num=[1,2,3,4]

Friends = [“k”,”s”, “h”]

Friends.**extend**(Num)

Print(friends) // [“k”,”s”, “h”, 1,2,3,4]

Friends = [“k”,”s”, “h”]

Friends.**append**(“haha”)

Print(friends) // [“k”,”s”, “h”, “haha”]

Friends = [“k”,”s”, “h”]

Friends.**insert(1,** “haha”)// index

Print(friends) // [“k”,”haha”,”s”, “h”]

Friends = [“k”,”s”, “h”]

Friends.**remove(“s”)**

Print(friends) // [“k”, “h”]

Friends.**clear()**

Print(friends) // empty list

Friends = [“k”,”s”, “h”]

Friends.**pop()**

Print(friends) // [“k”, “s”] // remove last element

Friends = [“k”,”s”, “h”]

Print(friends.**index**(“k”) ) //0

Friends = [“k”,”s”, “h”,”k”]

Print(friends.**count**(“k”) ) //2

Num=[3,2,1,4]

Num. **sort()**

Print(num ) //[1,2,3,4]

Num=[3,2,1,4]

Num. **reverse()**

Print(num) ) //[4,3,2,1]

Num=[3,2,1,4]

Num2 = num.copy()

Print(num2 ) //[3,2,1,4]

//Tuple

C = (4,5) // tuple cant be changed after created// use data that never going to change

Print(c[0]) // 4

//function

Def sayhi():

Print(“hi”)

//calling the function

Sayhi(); // hi

//parameter

Def sayhi(name):

Print(“hi ”+name)

Sayhi(“su”); // hi su

// return statement

Def cube(num)

Return num\*num\*num

Print(cube(3)) //27

Result = cube(4)

Print(result) //64

//if statement

Is\_male = True

Is\_tall = True

If is\_male or is\_tall: // one of the value is true

Print(“male or tall of both”)

Else:

Print(“neither male nor tall”)

If is\_male and is\_tall:

Print(“you are a tall male”)

Elif is\_male and not(is\_tall) // elif: else if

Print(“you are a short male”)

Elif …

Else:

print (“..”)

//if statements& comparisons

Def max\_num(num1, num2,num3)

If num1 > = num2 and num1 >= num3:

Return num 1

Elif num2 >= num1 and num2 >= Num3:

Return num 2

Else:

Return num 3

Print(max\_num(1,2,3)) //3

Equal ==

Not equal !=

//Building a better calculator

Num1 =float( input(“input num1”))

Num2 = float(input(“input num2”))

Op = input(“operator”)

If op == “+”:

Print(num1 + num2)

elif op == “-”:

Print(num1 - num2)

elif op == “\*”:

Print(num1 \* num2)

elif op == “/”:

Print(num1 / num2)

Else:

Print(“invalid”)

// dictionaries

Key value pairs

Jan -> january

Mar -> march

monthConversions = {

“jan”:”January”, //key value

“feb”: “februaty”,

“mar”: “march”,

4: ” April”,

}

Print(monthConversions[“jan”]) // January

Print(monthConversions.get(“jan”)) // January

Print(monthConversions.get(“haha”, “not a valid key”)) // not a valid key

// while loop

I =1

While i<=10:

Print (i)

I += 1

Print (“done”)

//building a guess game

Secret\_word = “ggg”

Guess = “”

Guess\_count = 0

Guess\_limit = 3

Out\_of\_guesses = False

While Secret\_word != Guess and not( Out\_of\_guesses)

If Guess\_count< Guess\_limit :

Guess = input(“enter guess : ”)

Guess\_count += 1

Else:

Out\_of\_guesses = true

If Out\_of\_guesses:

Print(“out of guesses”)

Else:

Print(“win”)

//for loop

for letter in “giraffe academy”:

print(letter)

//

G

I

R

A

F

F

E

…

//array

Friends = [“jim”,”karen”, “kevin”]

for Friend in friends: // we can name friend whatever we want

print(friend)

//

Jim

Karen

Kevin

Friends = [“jim”,”karen”, “kevin”]

for index in range(len(friends)):

print(friends[index])

//

Jim

Karen

Kevin

For index in range (10):

Print (index)

//0

1

2

3

…

9

For index in range (3,10):

Print (index)

//

3

4

…

9

//exponent function

Print(2\*\*3) //2^3

Def raise\_to\_power(base\_num,pow\_num)

Result = 1

For index in range(pow\_num)

Result = result \*base\_num

Return result

Print (raise\_to\_power(2,3)) // call the function

// 2d lists and nested loops

//building a translator

// comments—

// try/ except

Try:

Number = int (input”enter a number: “)

Print (number)

Except:

Print (“invalid input”) // catch the error