|  |
| --- |
| my\_int = 87 |
|  | my\_float = 8.7 |
|  | my\_complex = 8 + 7j |
|  | my\_bool = True |
|  | my\_str = "Introduction to Python Data Science" |
|  |  |
|  | type(87) |
|  | type(8.7) |
|  | type(8 + 7j) |
|  | type(True) |
|  | type(False) |
|  | type("Introduction to Python Data Science") |
|  | →str |
|  |  |
|  | print ("開始輸出") |
|  | print (1, 2, 3) |
|  | print (1, 2, 3, sep = " ", end = " ") |
|  | print(4, 5, 6, sep="|", end="\n") |
|  | →開始輸出 |
|  | 1 2 3 |
|  | 1 2 3 4|5|6 |
|  |  |
|  | score = 66 |
|  | print("小明的數學成績：%d" % score) |
|  | print("%5s的數學成績：%5.2f" %("Jenny", 95)) |
|  | print("%5s的數學成績：%5.2f" %("Andy", 80.2)) |
|  | print("{0}今年{1}歲。" .format("王小明" , 18)) |
|  | print("{name}今年{age}歲。" .format(name = "王小明" , age = 18)) |
|  | name = "王小明" |
|  | chinese\_grade = input("88") |
|  | english\_grade = input("89") |
|  | print("{0:8}{1:>5}{2:>5}" .format("小明","88","89")) |
|  | print("{0:<10}{1:>6}{2:>6}" .format("小明","88","89")) |
|  | →小明的數學成績：66 |
|  | Jenny的數學成績：95.00 |
|  | Andy的數學成績：80.20 |
|  | 王小明今年18歲。 |
|  | 王小明今年18歲。 |
|  | 88 |
|  | 89 |
|  | 小明 88 89 |
|  | 小明 88 89 |
|  |  |
|  | 8 + 7 |
|  | 8 - 7 |
|  | 8 \* 7 |
|  | 8 / 7 |
|  | 8 \*\* 2 |
|  | 8 % 7 |
|  | →1 |
|  |  |
|  | 8 / 7.0 |
|  | 8 + (8 + 7j) |
|  | "---" |
|  | type(8 / 7.0) |
|  | type(8 + (8 + 7j)) |
|  | type("---") |
|  | →str |
|  |  |
|  | x = "5" |
|  | num = 5 + int(x) |
|  | print(num) |
|  | →10 |
|  |  |
|  | x = "5.3" |
|  | num = 5 + float(x) |
|  | print(num) |
|  | →10.3 |
|  |  |
|  | x = "5.3" |
|  | num = 5 + float(x) |
|  | print("輸出的數值是" + str(num)) |
|  | →輸出的數值是10.3 |
|  |  |
|  | 8 == 7 |
|  | 8 != 7 |
|  | 8 > 7 |
|  | 8 < 7 |
|  | 8 > 7 |
|  | →True |
|  |  |
|  | True and True |
|  | True and False |
|  | False & True |
|  | False & False |
|  | print("---") |
|  | True or True |
|  | True or False |
|  | False | True |
|  | False | False |
|  | print("---") |
|  | print(not True) |
|  | print(not False) |
|  | →--- |
|  | --- |
|  | False |
|  | True |
|  |  |
|  | 8 + True |
|  | 8 - False |
|  | 8 \* False |
|  | 8 / True |
|  | →8.0 |
|  |  |
|  | True == 1 |
|  | True == 1.0 |
|  | True == 1 + 0j |
|  | print("1 + 0j") |
|  | False == 0 |
|  | False == 0.0 |
|  | False == 0 + 0j |
|  | →1 + 0j |
|  | True |
|  |  |
|  | 'I am loving it!' |
|  | 'I\'m loving it!' |
|  | 'I don\'t think you\'ll ever be just "anybody".' |
|  | "I don't think you'll ever be just \"anybody\"." |
|  | →'I don\'t think you\'ll ever be just "anybody".' |
|  |  |
|  | str1 = "Hello!" + "How Are You?" |
|  | print(str1) |
|  | str2 = "Hello!" \* 3 |
|  | print(str2) |
|  | str3 = "Hello!\nHow Are You?" |
|  | print(str3) |
|  | print("I'm" + " loving" + " it!") |
|  | print("I'm loving it" + "!" \* 3) |
|  | →Hello!How Are You? |
|  | Hello!Hello!Hello! |
|  | Hello! |
|  | How Are You? |
|  | I'm loving it! |
|  | I'm loving it!!! |
|  |  |
|  | str = "ABCDEFGHIJK" |
|  | print(str[0]) |
|  | print(str[-2]) |
|  | print(str[:7:2]) |
|  | print(str[2::2]) |
|  | print(str[::2]) |
|  | str1 = "Do \none \nthing \nat a time!" |
|  | print(str1.split()) |
|  | print(str1.split( ' ', 2 )) |
|  | →A |
|  | J |
|  | ACEG |
|  | CEGIK |
|  | ACEGIK |
|  | ['Do', 'one', 'thing', 'at', 'a', 'time!'] |
|  | ['Do', '\none', '\nthing \nat a time!'] |
|  |  |
|  | str = "The first wealth is health! Health is important!" |
|  | print ("{},長度是{}" .format(str, len(str))) |
|  | print(str.upper()) |
|  | print(str.lower()) |
|  | print("health".capitalize()) |
|  | str.islower() |
|  | str.count("health") |
|  | str.strip("h!") |
|  | str.replace("important", "重要") |
|  | →The first wealth is health! Health is important!,長度是48 |
|  | THE FIRST WEALTH IS HEALTH! HEALTH IS IMPORTANT! |
|  | the first wealth is health! health is important! |
|  | Health |
|  | 'The first wealth is health! Health is 重要!' |
|  |  |
|  | from datetime import date |
|  | sys\_date = date.today |
|  | print(sys\_date) |
|  | print (type (sys\_date)) |
|  | →<built-in method today of type object at 0x9f9f00> |
|  | <class 'builtin\_function\_or\_method'> |
|  |  |
|  | from datetime import date |
|  | start\_of\_2017 = date(2017, 1, 1) |
|  | end\_of\_2017 = date(2017, 12, 31) |
|  | start\_of\_2017 |
|  | end\_of\_2017 |
|  | →datetime.date(2017, 12, 31) |
|  |  |
|  | from datetime import date |
|  | start\_of\_2017 = date(2017, 1, 1) |
|  | start\_of\_2018 = start\_of\_2017.replace(year = 2018) |
|  | start\_of\_2018 |
|  | →datetime.date(2018, 1, 1) |
|  |  |
|  | from datetime import date |
|  | start\_of\_2017 = date(2017, 1, 1) |
|  | end\_of\_2017 = start\_of\_2017.replace(month = 12, day = 31) |
|  | days\_dff = end\_of\_2017 - start\_of\_2017 |
|  | days\_dff.days |
|  | →364 |
|  |  |
|  | from datetime import time |
|  | sleep\_time = time(23, 0, 0) |
|  | sleep\_time |
|  | type(sleep\_time) |
|  | →datetime.time |
|  |  |
|  | from datetime import time |
|  | sleep\_time = time(23, 0, 0) |
|  | wake\_up\_time = sleep\_time.replace(hour = 7) |
|  | wake\_up\_time |
|  | →datetime.time(7, 0) |
|  |  |
|  | from datetime import datetime |
|  | sys\_datetime = datetime.now() |
|  | sys\_datetime |
|  | type(sys\_datetime) |
|  | →datetime.datetime |
|  |  |
|  | from datetime import datetime |
|  | start\_of\_2017 = datetime(2017, 1, 1, 0, 0, 0) |
|  | start\_of\_2017 |
|  | →datetime.datetime(2017, 1, 1, 0, 0) |
|  |  |
|  | from datetime import datetime |
|  | start\_of\_2017 = datetime(2017, 1, 1, 0, 0, 1) |
|  | end\_of\_2017 = start\_of\_2017.replace(month = 12, day = 31, hour = 23, minute = 59, second = 59) |
|  | end\_of\_2017 |
|  | →datetime.datetime(2017, 12, 31, 23, 59, 59) |
|  |  |
|  | from datetime import datetime |
|  | start\_of\_2017 = datetime(2017, 1, 1, 0, 0, 1) |
|  | end\_of\_2017 = start\_of\_2017.replace(month = 12, day = 31, hour = 23, minute = 59, second = 59) |
|  | date\_time\_diff = end\_of\_2017 - start\_of\_2017 |
|  | date\_time\_diff.days |
|  | date\_time\_diff.seconds |
|  | →86398 |