

Python CCC101

Env

pycharm

Debugging skills:

1. print
2. Breakpoint, step over/step into/step out

Find shortcut: double shift

Comments

```
#, """
```

Variable

```
x=100
```

```
# convert type  
int(), float(), str()
```

Input

```
i = input()
```

Output

```
print("hello", end='')
```

```
'%.2f' % 123.456
```

Data types

Number

```
+, -, *, /, //, **, %, +=
```

Boolean: True, False

not, or, and

String

```
s = "hello"  
"abc"+"def"  
s=s*3
```

Special chars: \n

indexing

```
s[1], s[-1]
```

slicing:

```
s[0:3]  
s[::-1]
```

split

```
c1,c2='a b'.split()
```

replace

```
s=str.replace("a", "A")  
s=str.replace("a", '')
```

query

```
str.count("a")  
'abc'.find('a')
```

case

```
str.lower()
```

Statement

```
If, elif, else  
for c in iterable:  
    pass
```

```
while True:  
    pass
```

break, continue

nested loop

Functions

```
def add(a,b):  
    return a+b
```

Build-in function

```
list(), set()  
  
l.sort(), ll=sorted(l)  
l.reverse(), ll=reversed(l)  
  
len()
```

range

```
range(start,stop,step)
```

math

```
max(), min(), sum(), abs()
```

Iterable(Collection)

List:

```
list1=[1,2,3]  
nested_list=[1,2,3,[4,5]]
```

read:

```
list1[index]  
nested_list[3][1]
```

query:

```
list1.index("a")  
list1.count("a")
```

update: list1[1]="two"

Add:

```
l.append(1)  
l.insert(index, "a")
```

delete:

```
l.remove("a")  
l.pop(); l.pop(index)  
l.clear()
```

join: l+[3,4]

copy: l2 = l[:]

convert:

```
list1=list(str)  
",".join(iterable)
```

Set:

```
s=set()  
s={1,2}
```

Add: s.add('one')

delete:

```
s.remove('a')  
s.pop()  
s.clear()
```

Dictionary

```
d={}  
d={'key':'value'}
```

read: d['key']

update: d['key']=100

Add:

d['non_exist_key']=100

delete:

```
d.pop(key)
```

query: 'key' in dict1

Random

```
import random  
random.randint(a,b)  
(a<=x<=b)
```

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