

# 1.打印输出

使用print() 语句实现在屏幕上打印你需要的输出内容

In [4]:

```
print("hello,world!")
```

hello,world!

## 多行输出

In [5]:

```
print("hello")
print("谢谢大家！！")
print("Here is a Python Program")
```

hello  
谢谢大家！！  
Here is a Python Program

# 2. 字符串

"hello,wolrd!"这样的文本被成为字符串

## 字符串规范

In [7]:

```
#引号开头和结尾
print("你好，世界)
```

```
File "C:\Users\85204\AppData\Local\Temp\ipykernel_27128\909619582.py", line 2
    print("你好，世界)
```

SyntaxError: EOL while scanning string literal

In [8]:

```
print("你好，  
世界")
```

```
File "C:\Users\85204\AppData\Local\Temp\ipykernel_27128\2967493655.py", line 1  
    print("你好，  
          ^
```

SyntaxError: EOL while scanning string literal

In [9]:

```
#如果实在要跨越多行  
print(''  
hello,  
world!  
'')
```

```
hello,  
world!
```

### 转义字符：用于表示特殊字符

\t:制表符

\n: 换行符

\"双引号

\单引号

\\ 反斜杠

In [13]:

```
print("姓名\t身高\t体重")
```

```
姓名  
身高  
体重
```

In [ ]:

```
print("姓名\n身高\n体重")
```

In [17]:

```
print("hello\"")
```

```
hello"
```

### 3. 打印复杂图形

In [18]:

```
print(
    ', , ,
```

[illegible]

## 用Python打印一个菱形

In [19]:

```
print("  /\  ")
print(" /\  ")
print("  \/  ")
print("  \/  ")
```

#### 4. 注释、空白、可读性

## 一个可读性较差的程序

In [20]:

```
print(  
    "Look at this beautiful program!"  
)  
  
print(  
    "I do believe it is")  
  
print("hello, world!")
```

```
Look at this beautiful program!  
I do believe it is  
hello, world!
```

In [ ]:

```
print("Look at this beautiful program!")  
  
print("I do believe it is")  
  
print("hello, world!")
```

## 如何改善程序的可读性

- 将每个语句单独放在一行上
- 使用空行分隔不同
- 功能的语句
- 编写程序注释

## 程序注释

In [24]:

```
#这段程序是开场白  
  
print("hello, world!")
```

```
hello, world!
```

## 多行注释

In [25]:

```
'''  
这段程序是开场白  
说的是你好，世界  
'''  
  
print("hello, world!")
```

```
hello, world!
```

## 5.语法错误

尽管人们对口语中的小错误非常宽容，但是Python解释器并不那么宽容。如果我们的程序没有严格地按照语法规则执行，解释器会在将你的程序从Python语言转换到可执行的机器语言的时候报告语法错误。对于一个精密运行的系统而言，一点点微小的错误可能是致命的。

### 拼写错误

In [27]:

```
print("hello,world!")
```

hello,world!

In [28]:

```
prunt("hello,world!")
```

```
-----  
NameError                                Traceback (most recent call last)  
~\AppData\Local\Temp\ipykernel_27128\3556354443.py in <module>  
----> 1 prunt("hello,world!")
```

NameError: name 'prunt' is not defined

In [30]:

```
print("hello,world!)
```

```
File "C:\Users\85204\AppData\Local\Temp\ipykernel_27128\306879190.py", line 1  
    print("hello,world!)
```

SyntaxError: EOL while scanning string literal

In [31]:

```
print( "hello,world!" )
```

```
File "C:\Users\85204\AppData\Local\Temp\ipykernel_27128\332042358.py", line 1  
    print( "hello,world!" )
```

SyntaxError: invalid character '“' (U+201C)

In [32]:

```
print(hello, world)
```

```
-----  
-----  
NameError                                Traceback (most recent call last)  
~\AppData\Local\Temp\ipykernel_27128\2595165328.py in <module>  
----> 1 print(hello, world)
```

NameError: name 'hello' is not defined

## 课间练习： 用Python 打印一个简单的图形，并在图形中涉及到字符串

例如： 打印一个火箭

In [33]:

```
print("      /\      ")  
print("     /\      ")  
print("    /\      ")  
print("   ____      ")  
print("  |          |      ")  
print("  |hello     |      ")  
print("  |          |      ")  
print("   ____      ")  
print("  |          |      ")  
print("  |world     |      ")  
print("  |          |      ")  
print("   ____      ")  
print("  /\      ")  
print(" /\      ")
```

```
      /\  
     /\  
    /\  
   ____  
  |          |  
  |hello     |  
  |          |  
   ____  
  |          |  
  |world     |  
  |          |  
   ____  
  /\  
 /\
```

In [ ]: