

练习

赋值

```
1 | int a=1;
```

```
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```

数组和指针

```
1 | char* s[10];
```

```
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```

循环

```
1 | int main()
2 | {
3 |     int i, a[10];
4 |     for(i = 0; i < 10; ++i)
5 |         a[i] = i * i;
6 |     return 0;
7 | }
```

```
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```

格式化输出

```
1 | #include <stdio.h>
2 | int main()
3 | {
4 |     int x = 0, y = 2;
5 |     printf("%d, %d\n", x, y);
6 |     return 0;
7 | }
```

```
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```

输入和判断

```
1 #include <stdio.h>
2 int main()
3 {
4     int a;
5     scanf("%d", &a);
6     if(a > 10)
7         printf("too big");
8     else if(a < 0)
9         printf("too small");
10    else
11        printf("fine");
12    return 0;
13 }
```

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选择

```
1 #include <stdio.h>
2 int main()
3 {
4     int a;
5     scanf("%d", &a);
6     switch(a)
7     {
8         case 1:
9             printf("hi\n");
10            break;
11        case 2:
12            printf("bye\n");
13            break;
14        default:
15            printf("go\n");
16    }
17    return 0;
18 }
```

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库和数字格式

```
1 | #include <math.h>
2 | #include <stdio.h>
3 | double mcos(double x) {return cos(x);}
4 | int main()
5 | {
6 |     int a;
7 |     scanf("%d", &a);
8 |     printf("%08.21f\n", mcos((double)a));
9 |     return 0;
10 | }
```

```
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```

简单函数

```
1 | int max(int a, int b)
2 |     return a < b ? b : a;
```

```
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```

判断复合和移位

```
1 | if(a > b && (10 > 1 << i)) {a += 1;}
```

```
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```

多元素输入

```
1 | print("Input a, b:")
2 | scanf("%d, %d", &a, &b)
```

```
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```

数字与字符串转换（字符处理）

```
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```

```
1 | def main():
2 |     string = input("Please input a number:")
3 |     print(int(string))
4 |     print(str(int(string)))
5 | if __name__ == "__main__":
6 |     main()
```

Retranslate back from C to python line by line

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凯撒密码

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```
1 | from string import ascii_lowercase as lc, ascii_uppercase as uc
2 | shift = dict(list(zip(lc, lc[k:] + lc[:k])) + list(zip(uc, uc[k:] +
   | uc[:k])))
3 | str_ = ''.join([shift[c] for c in str_])
```

Retranslate back from C to python line by line

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截断/切片

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```
1 | str2 = str1
2 | print(str2[start:end])
```