

# Java实验1

## 实验1：Java基础知识

### 学习目标

- 练习撰写、编译以及运行Java程序
- 学习IDEA集成开发环境
- 接触语法错误以及如何调试
- 学习基本输出及静态函数

### 实验内容

- 使用IDEA编写和运行Java程序

```
public class MyFirstProgram {  
    public static void main(String[] args) {  
        System.out.println("Hello, world!");  
        System.out.println();  
        System.out.println("This is my very first program");  
        System.out.println("in BUPT Postgraduate Java Course!");  
    }  
}
```

- 修改代码，使其输出如下内容

```
Hello, world!  
I am taking Java Course.  
I hope it is a lot of fun!  
老师棒棒哒，  
希望能给我90+的分数！
```

- 正确的缩进可以使得代码容易阅读和理解，修改如下代码，使其缩进合理

```
public class Icky {  
public static void main(String[] args) {  
System.out.println("Properly indented programs");  
}
```

```

        System.out.println("look ever so much better!");
    System.out.println("please fix me");
        System.out.println("and make me beautiful again");
}
}

```

- 熟悉IDEA的代码整理功能（菜单位置）
- 如下内容的代码输出一共多少行？先判断，再运行代码

```

public class Tricky {
    public static void main(String[] args) {
        System.out.println("Testing, testing,");
        System.out.println("one two three.");
        System.out.println();

        System.out.println("How much output");
        System.out.println();
        System.out.println("will there be?");
    }
}

```

- 解决如下代码的语法错误问题

```

public class Tricky
    public static main(String args) {
        System.out.println(Hello world);
        system.out.Pritnln("Do you like this program?");
        System.out.println()

        System.println("I wrote it myself.");
    }
}

```

line 1: missing { after Tricky

line 2: missing void before main

line 2: missing [] after String

line 3: missing " marks around Hello world

line 4: system should be System (uppercase S)

line 4: Pritnln should be println (lowercase P and fixed spelling)

line 4: ? should be before "

line 5: missing semicolon after ()

line 7: missing ) after "

line 8: `System.println` should be `System.out.println`

line 8: { should be }

- 了解转义字符

```
\n \t \" \\
```

## 示例

```
System.out.println("I said \"hello\" to Fred.");
```

如下代码的输出是什么？

```
System.out.println("Shaq is 7'1");
System.out.println("The string \"\" is an empty message.");
System.out.println("\\'\\\"\\\\\\\\");
```

编写代码，运行并输出如下内容

A "quoted" String is  
'much' better if you learn  
the rules of "escape sequences."

Also, "" represents an empty String.  
Don't forget: use \" instead of " !  
' is not the same as "

编写代码，使其运行输出如下内容

$$\begin{array}{c} \backslash \\ \backslash \backslash / \\ \backslash \backslash \backslash / / \\ / / \backslash \backslash \\ / \backslash \backslash \\ \backslash \end{array}$$

编写代码，输出你姓名拼音字母的大写方式

M                      M                      SSSSS                      PPPPPP

MM	MM	S	S	P	P
M	M	M	M	S	P
M	M	M	SSSSS	PPPPPP	
M	M		S	P	
M	M	S	S	P	
M	M	SSSSS		P	

将下面代码修改为至少包含两个静态函数的版本

```
public class FightSong {
    public static void main(String[] args) {
        System.out.println("Go, team, go!");
        System.out.println("You can do it.");
        System.out.println();
        System.out.println("Go, team, go!");
        System.out.println("You can do it.");
        System.out.println("You're the best,");
        System.out.println("In the West.");
        System.out.println("Go, team, go!");
        System.out.println("You can do it.");
        System.out.println();
        System.out.println("Go, team, go!");
        System.out.println("You can do it.");
        System.out.println("You're the best,");
        System.out.println("in the West.");
        System.out.println("Go, team, go!");
        System.out.println("You can do it.");
        System.out.println();
        System.out.println("Go, team, go!");
        System.out.println("You can do it.");
    }
}
```