

# Lab 01 Assignment

---

班级: 202113

学号: 20373221

姓名: 王宇奇

## Question 01:

---

(a):Person.java

(b):两个; Person.class, Xiti.class

(c):

执行java Person:

错误: 找不到或无法加载主类 Person

原因: java.lang.NoClassDefFoundError: package1/Person (wrong name: Person)

执行java xiti:

错误: 找不到或无法加载主类 xiti

原因: java.lang.NoClassDefFoundError: package1/Xiti (wrong name: xiti)

执行java Xiti.class:

错误: 找不到或无法加载主类 Xiti.class

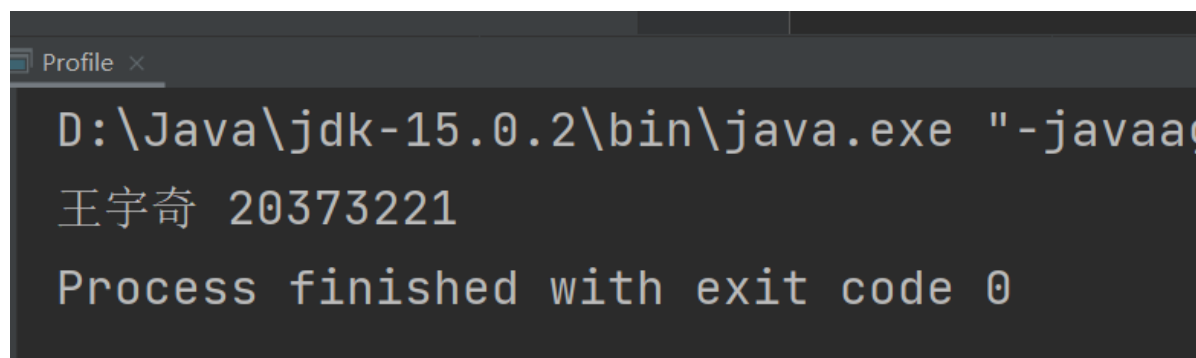
原因: java.lang.ClassNotFoundException: Xiti.class

执行java Xiti:

您好, 很高兴认识您 nice to meet you

## Question 02:

---



```
Profile x
D:\Java\jdk-15.0.2\bin\java.exe "-javaag
王宇奇 20373221
Process finished with exit code 0
```

## Question 03:

---

'大'的Unicode编码: 22823  
Unicode编码为23398的字符是: 学

## Question 04:

---

```
intArray[0]=8  
intArray[1]=9  
intArray[2]=12  
intArray[3]=13  
intArray[4]=14  
  
sum=56
```

## Question 05:

---

```
b[0][0]=1000  
sum=1139  
b.lengh=3  
arr1:  
0 1 2 3 4 5 6 7 8 9 10 11  
arr2:  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
arr3:  
0 1 2 3 4 5 6 7 8
```

## Question 06:

---

Jeep好好

case1和case3中没有写break,因此它们下面含有break的case2和default各多执行了一次

## Question 07:

---

D:\Java\jdk-15.0.2\bin

5

1 2 3 4 5

6 7 8 9 10

11 12 13 14 15

16 17 18 19 20

21 22 23 24 25

7

1 2 3 4 5 6 7

8 9 10 11 12 13 14

15 16 17 18 19 20 21

22 23 24 25 26 27 28

29 30 31 32 33 34 35

36 37 38 39 40 41 42

43 44 45 46 47 48 49

Question 08:

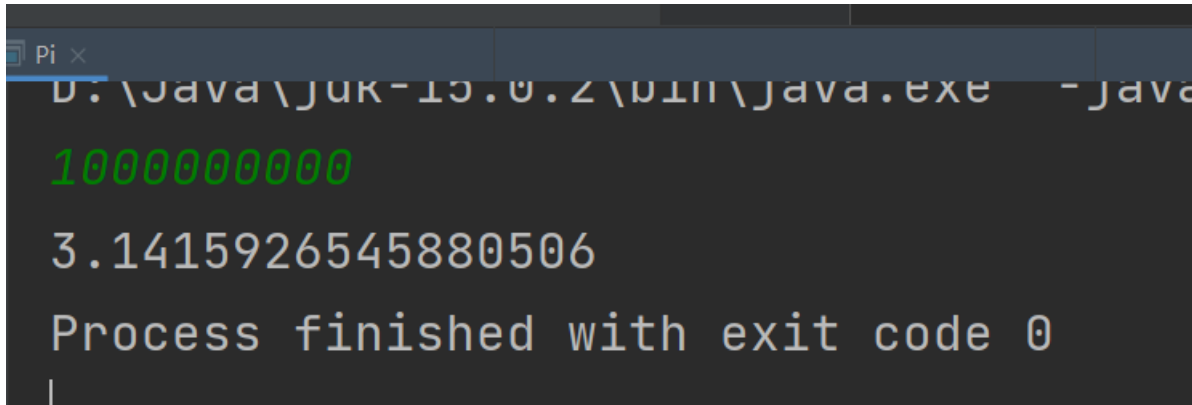
---

```
Star x
D:\Java\jdk-15.0
5
  *
 ***
*****
 ***
  *
```

```
Star x
D:\Java\jdk-15.0.2\
7
  *
 ***
*****
*****
 *****
  ***
   *
```

## Question 09:

```
public static double getPi(int n){
    double ans=0;
    if(n<0) n=0;
    for(int i=0;i<=n;i++){
        if(i%2==1) ans-=1.0/(2*i+1);
        else ans+=1.0/(2*i+1);
    }
    return 4*ans;
}
```

A screenshot of a Java IDE window titled 'Pi x'. The command line shows 'D:\Java\jdk-15.0.2\bin\java.exe -java'. The output in the console is '1000000000' in green, followed by '3.1415926545880506' in white, and 'Process finished with exit code 0' in white.

```
D:\Java\jdk-15.0.2\bin\java.exe -java
1000000000
3.1415926545880506
Process finished with exit code 0
```

## Question 10:

```
public static void sort(int[] arr,int l,int r){
    if(l>r) return;
    int flag=arr[l],i=l,j=r;
    while (i!=j){
        while (arr[j]>=flag&& i<j){
            j--;
        }
        while (arr[i]<=flag&& i<j){
            i++;
        }
        if(i<j){
            int tmp=arr[i];
            arr[i]=arr[j];
            arr[j]=tmp;
        }
    }
    arr[l]=arr[i];
    arr[i]=flag;
    sort(arr,l,i-1);
    sort(arr,i+1,r);
    return ;
}

public static int[] qsort(int[] arr){
    if(arr==null) return null;
    if(arr.length==1) return arr;
    sort(arr,0,arr.length- 1);
    return arr;
}
```

```
arr_sort x
D:\Java\jdk-15.0.2\bin\java.exe "-ja
1 2 3 4 5 6 7 8
Process finished with exit code 0
```

### Question 10.5(原Question 13)

```
arr_sort x
D:\Java\jdk-15.0.2\bin\java.exe "-ja
-45 12 45 67 67 89 123
89
true
Process finished with exit code 0
```

```
arr_sort x
D:\Java\jdk-15.0.2\bin\java.exe "-ja
-45 12 45 67 67 89 123
87
false
Process finished with exit code 0
```

### Question 11

```
ForInString x
D:\Java\jdk-15.0.2\bin\java.exe "-javaagen
A n A f r i c a n S w a l l o w
Process finished with exit code 0
```

### Question 12

p1的x,y坐标:1111,2222

p2的x,y坐标:-100,-200

p1的x,y坐标:0,0

p2的x,y坐标:0,0

## Question 13

---

数组a的元素个数=4

数组b的元素个数=3

数组a的引用=[I@4e50df2e

数组b的引用=[I@1d81eb93

数组a的元素个数=3

数组b的元素个数=3

a[0]=100,a[1]=200,a[2]=300

b[0]=100,b[1]=200,b[2]=300

a=b将b的引用赋给了a，因此a的元素个数及内容在赋值之后与b相同

## Question 14

---

1

2

-1

-2

-3

-4

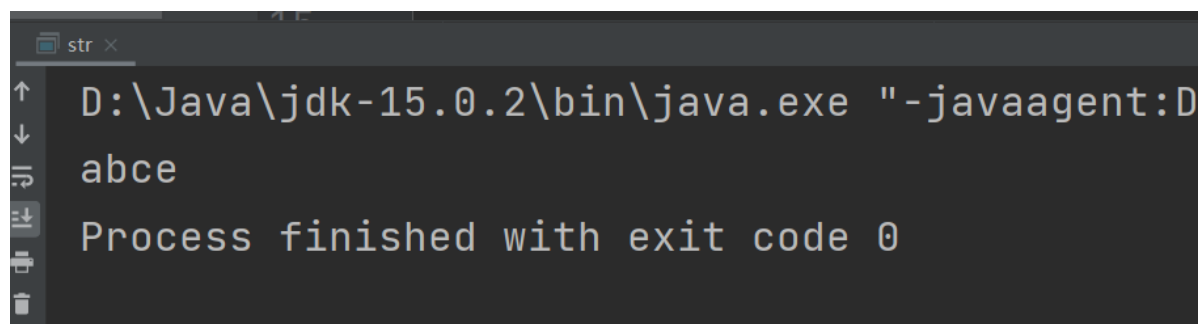
9

7

6

## Question 15

---



```
str x
D:\Java\jdk-15.0.2\bin\java.exe -javaagent:D:\Java\jdk-15.0.2\bin\javaagent.jar abce
abce
Process finished with exit code 0
```

(1) 可以

(2) 不能

(3) 不能

## Question 16

---

对象：小王

类：人

属性：体重

行为：减肥

状态：减肥前状态：小王体重70kg；减肥后状态：小王体重45kg；

状态变化：减肥行为使得小王的体重发生了变化

## Question 17

---

父类：人

子类：采购员，厨师

父类的属性：名字

采购员，厨师的属性：名字

采购员的行为：买菜

厨师的行为：做菜

```
D:\Java\jdk-15.0.2\bin\java.exe
```

```
Aunt buys carrot
```

```
Mom buys rice
```

```
I buys cucumber
```

```
Dad makes carrot
```

```
Aunt2 makes carrot and rice
```