

第二章第2次作业

返回

 姓名：李全欣 班级：计算机2018级4-7 成绩： 92分

一.简答题 (共3题,100.0分)

1 编写一个应用程序求100以内的全部素数。

正确答案：

```
public class Xiti2 {
    public static void main(String args[]) {
        int i,j;
        for(j=2;j<=100;j++) {
            for(i=2;i<=j/2;i++) {
                if(j%i==0)
                    break;
            }
            if(i>j/2) {
                System.out.print(" "+j);
            }
        }
    }
}
```

我的答案：

module-info.java Lqx1.java .classpath

```
1 package Lqx;
2 import java.util.*;
3 public class Lqx1 {
4     public static void main(String[] args) {
5         int i,sum=2,j,flag;
6         for(i=3;i<100;i++)
7         {
8             flag=1;
9             for(j=2;j<i;j++)
10            {
11                if(i%j==0)
12                {
13                    flag=0;
14                    break;
15                }
16            }
17            if(flag==1)
18                sum+=i;
19        }
20        System.out.println(sum);
21    }
22 }
23
```

Problems @ Javadoc Declaration Console

<terminated> Lqx1 [Java Application] C:\Program Files\Java\jdk-11.0.6\bin\javaw.exe (1060

批语

题意理解错误

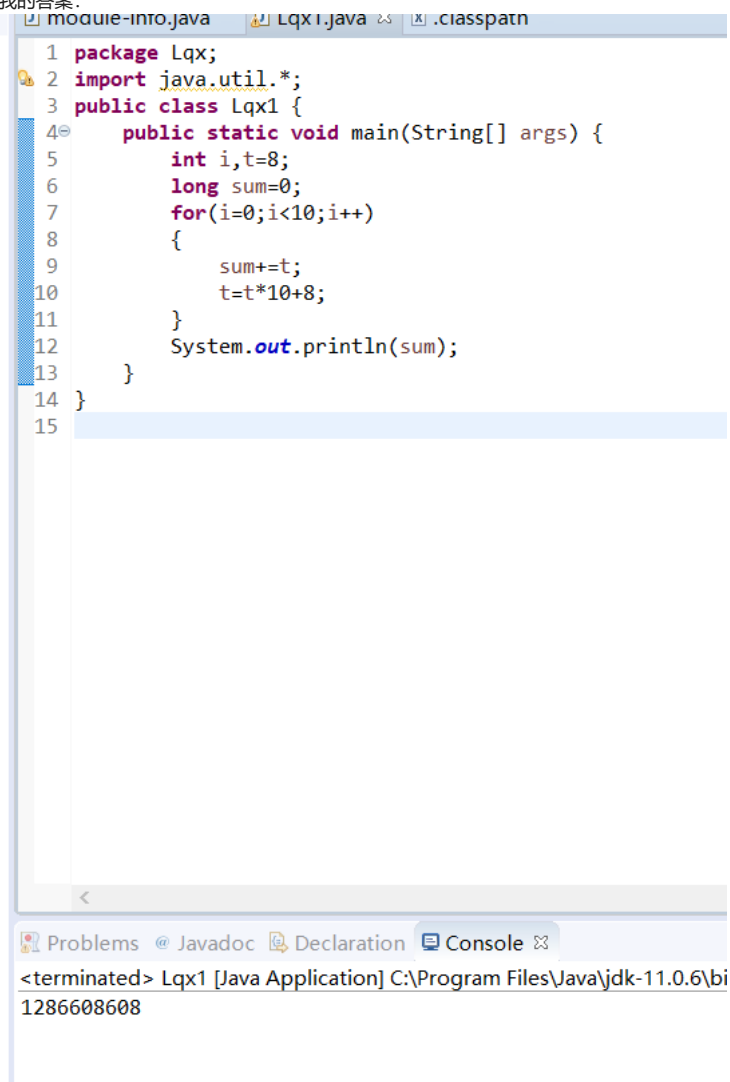
答案解析:

## 2 编写应用程序,使用for循环语句计算 $8+88+888\ldots$ 前10项之和。

正确答案:

```
public class Xiti5 {  
    public static void main(String args[]) {  
        int m=8,i=1;  
        long sum=0,item=m;  
        for(i=1,sum=0,item=m;i<=10;i++) {  
            sum=sum+item;  
            item=item*10+m;  
        }  
        System.out.println(sum);  
    }  
}
```

我的答案:



The screenshot shows an IDE with a Java file named Lqx1.java. The code is as follows:

```
1 package Lqx;  
2 import java.util.*;  
3 public class Lqx1 {  
4     public static void main(String[] args) {  
5         int i,t=8;  
6         long sum=0;  
7         for(i=0;i<10;i++)  
8         {  
9             sum+=t;  
10            t=t*10+8;  
11        }  
12        System.out.println(sum);  
13    }  
14 }  
15
```

Below the code editor, the console output is shown:

```
<terminated> Lqx1 [Java Application] C:\Program Files\Java\jdk-11.0.6\bin\java.exe  
1286608608
```

答案解析:

## 3 分别用do-while和for循环计算 $1+1/2!+1/3!+1/4!\ldots$ 的前10项和。

正确答案:

```
class Xiti3 {  
    public static void main(String args[]) {  
        double sum=0,a=1,i=1;  
        do { sum=sum+a;  
            i++;  
            a=(1.0/i)*a;  
        }  
        while(i<=10);  
        System.out.println("使用do-while循环计算的sum="+sum);  
        for(sum=0,i=1,a=1;i<=20;i++) {  
            a=a*(1.0/i);  
            sum=sum+a;  
        }  
        System.out.println("使用for循环计算的sum="+sum);  
    }  
}
```

我的答案:

```
1 package Lqx;  
2 import java.util.*;  
3 public class Lqx1 {  
4     public static void main(String[] args) {  
5         int i=1;  
6         double sum=0.0,t=1.0;  
7         do  
8         {  
9             t*=i;  
10            sum=sum+1/t;  
11            i++;  
12        }while(i<=10);  
13        System.out.println(sum);  
14    }  
15 }  
16
```

Problems @ Javadoc Declaration Console

```
<terminated> Lqx1 [Java Application] C:\Program Files\Java\jdk-11.0.6\bin\jav  
1.7182818011463847
```



The screenshot shows an IDE with a Java file named `Lqx1.java` open. The code defines a package `Lqx`, imports `java.util.*`, and defines a public class `Lqx1` with a `main` method. The `main` method calculates a sum of reciprocals of products of integers from 1 to 10. The console output shows the program terminated successfully with the value `1.7182818011463847`.

```
1 package Lqx;
2 import java.util.*;
3 public class Lqx1 {
4     public static void main(String[] args) {
5         int i,j;
6         double sum=0.0,t;
7         for(i=1;i<=10;i++)
8         {
9             t=1.0;
10            for(j=1;j<=i;j++)
11            {
12                t=t*j;
13            }
14            sum=sum+1/t;
15        }
16        System.out.println(sum);
17    }
18 }
19
```

Problems @ Javadoc Declaration Console

<terminated> Lqx1 [Java Application] C:\Program Files\Java\jdk-11.0.6\bin\javaw.exe  
1.7182818011463847

答案解析: