

Pt bac 1:

J Pjava 3

C:\> Users > Administrator > Documents > GitHub> OOP.Lab.2024.20235697.TranVanDuy > Lab01 > 2.2.6 > J Pjava > ...

```
1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     Run | Debug
5     public static void main(String[] args) {
6         Scanner s=new Scanner(System.in);
7         String s1="Phuong trinh bac 1 mot bien\n2 He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
8         String strnum;
9         strnum=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Option", JOptionPane.INFORMATION_MESSAGE);
10        double p=Double.parseDouble(strnum);
11        if(p==1)
12        {
13            String s1;
14            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cau phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
15            double a=Double.parseDouble(s1);
16            String s2;
17            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cau phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
18            Double b=Double.parseDouble(s2);
19            if(a==0)
20            {
21                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
22                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
23            }
24            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a"+(-b/a),JOptionPane.INFORMATION_MESSAGE);
25        }
26        if(p==2)
27        {
28            String s1="Nhap he so cau he phuong trinh:\nax+by=c\nmx+ny=d\nNhap ";
29            String s2;
30            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
31            Double a=Double.parseDouble(s2);
32            String s3;
33            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
34            Double b=Double.parseDouble(s3);
35            String s4;
36        }
37    }
38 }
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodees_bffff8\jdt_ws\jdt.ls\java-project\b1\bin' 'Pt'
PS C:\Users\Administrator> <C:\Users\Administrator>
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodees_bffff8\jdt_ws\jdt.ls\java-project\b1\bin' 'Pt'
Exception in thread "main" java.lang.NullPointerException
 at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)
 at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:110)
 at java.lang.Double.parseDouble(Double.java:53)
 at Pt.main(Pt.java:17)
PS C:\Users\Administrator> <C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodees_bffff8\jdt_ws\jdt.ls\java-project\b1\bin' 'Pt'
```

0.0.3 Java Ready

Search [Administrator]

IntelliJ IDEA 2023.2.3

The screenshot shows a Java IDE interface with the following details:

- File Edit Selection View Go Run Terminal Help** - The top menu bar.
- Search [Administrator]** - The search bar at the top right.
- J Ptjava 3** - The title bar of the active window.
- C:\Users\Administrator> Documents > GitHub> OOPLab.2024.20235697.tranvanDuy > Lab01 > 2.2.6 > J Ptjava ->** - The command line history.
- Java code:**

```
1 import java.awt.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     Run | Debug
5     public static void main(String[] args) {
6         Scanner sc=new Scanner(System.in);
7         String s1="Phuong tinh bac 1 mot bien\n2.Me phuong trinh b 2 bien\n3.Phuong trinh bac 2 mot bien";
8         String strnum3;
9         strnum3= JOptionPane.showInputDialog(parentComponent:null,s1,title:"Option",JOptionPane.INFORMATION_MESSAGE);
10        double p=double.parseDouble(strnum3);
11        if(p==1)
12        {
13            String s1;
14            s1= JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
15            Double a=Double.parseDouble(s1);
16            String s2;
17            s2= JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
18            Double b=Double.parseDouble(s2);
19            if(a==0)
20            {
21                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nghiem",title:"Nhan thong bao",JOptionPane.INFORMATION_MESSAGE);
22                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",title:"Nhan thong bao",JOptionPane.INFORMATION_MESSAGE);
23            }
24            else JOptionPane.showMessageDialog(parentComponent:null,"x-b/a=-\u03c3(b/a)",title:"Nhan thong bao",JOptionPane.INFORMATION_MESSAGE);
25        }
26        if(p==2)
27        {
28            String s1="Nhap he so cua ba phuong trinh:\nax+by=c\nmx+ny=d\nNhap a:";
29            String s2;
30            s2= JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
31            Double a=Double.parseDouble(s2);
32            String s3;
33            s3= JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
34            Double b=Double.parseDouble(s3);
35            String s4;
36        }
37    }
38 }
```
- Output DEBUG CONSOLE TERMINAL PORTS** - The output tab showing terminal logs.
- Run Pt** - The run button in the toolbar.
- Java Ready** - The status bar at the bottom.

He phuong trinh 2 an:

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class PT {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=Double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nghiem",title:"Nhan loi",JOptionPane.ERROR_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",title:"Nhan loi",JOptionPane.ERROR_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a=-"+(-b/a),title:"Nhan ket qua",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\n\nNhap ";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0&&b!=0)
41            {
42                if(c!=0&&d!=0)
43                {
44                    if((c*a)-(d*b)!=0)
45                    {
46                        if((c*a)-(d*b)>0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nghiem",title:"Nhan loi",JOptionPane.ERROR_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",title:"Nhan loi",JOptionPane.ERROR_MESSAGE);
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a=-"+(-b/a),title:"Nhan ket qua",JOptionPane.INFORMATION_MESSAGE);
50                }
51            }
52        }
53    }
}

```

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập:";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0)
41            {
42                if(b!=0)
43                {
44                    if(c!=0)
45                    {
46                        if(d!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
50                }
51                else JOptionPane.showMessageDialog(parentComponent:null,"x=-c/a",JOptionPane.INFORMATION_MESSAGE);
52            }
53            else JOptionPane.showMessageDialog(parentComponent:null,"x=-d/c",JOptionPane.INFORMATION_MESSAGE);
54        }
55    }
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Users\Administrator & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Exception in thread "main" java.lang.NullPointerException  
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)  
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)  
at java.lang.Double.parseDouble(Double.java:538)  
at Pt.main(Pt.java:1)

P S C:\Users\Administrator <

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập:";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0)
41            {
42                if(b!=0)
43                {
44                    if(c!=0)
45                    {
46                        if(d!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=-c/a",JOptionPane.INFORMATION_MESSAGE);
50                }
51                else JOptionPane.showMessageDialog(parentComponent:null,"x=-d/c",JOptionPane.INFORMATION_MESSAGE);
52            }
53            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
54        }
55    }
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Users\Administrator & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Exception in thread "main" java.lang.NullPointerException  
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)  
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)  
at java.lang.Double.parseDouble(Double.java:538)  
at Pt.main(Pt.java:1)

P S C:\Users\Administrator <

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập:";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0)
41            {
42                if(b!=0)
43                {
44                    if(c!=0)
45                    {
46                        if(d!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=-c/a",JOptionPane.INFORMATION_MESSAGE);
50                }
51                else JOptionPane.showMessageDialog(parentComponent:null,"x=-d/c",JOptionPane.INFORMATION_MESSAGE);
52            }
53            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
54        }
55    }
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Users\Administrator & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Exception in thread "main" java.lang.NullPointerException  
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)  
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)  
at java.lang.Double.parseDouble(Double.java:538)  
at Pt.main(Pt.java:1)

P S C:\Users\Administrator <

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0&&b!=0)
41            {
42                if(c!=0&&d!=0)
43                {
44                    if((a*c)-(b*d)==0)
45                    {
46                        if((a*c)-(b*d)>0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
50                }
51            }
52        }
53    }
54}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
Exception in thread "main" java.lang.NullPointerException
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)
at java.lang.Double.parseDouble(Double.java:538)
at Pt.main(Pt.java:1)
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>

```

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF ( ) Java C 4:43 PM 3/4/2025

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0&&b!=0)
41            {
42                if(c!=0&&d!=0)
43                {
44                    if((a*c)-(b*d)==0)
45                    {
46                        if((a*c)-(b*d)>0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô ng",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô so ng");
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
50                }
51            }
52        }
53    }
54}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
Exception in thread "main" java.lang.NullPointerException
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)
at java.lang.Double.parseDouble(Double.java:538)
at Pt.main(Pt.java:1)
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>

```

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF ( ) Java C 4:43 PM 3/4/2025

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=Double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a==0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a"+(-b/a),JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nnhap";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",JOptionPane.INFORMATION_MESSAGE);
36            Double m=Double.parseDouble(s4);
37            Double n=Double.parseDouble(s4);
38            if(a==0)
39            {
40                if(m!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
41                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
42            }
43            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a"+(-b/a),title:"Nghiem",JOptionPane.INFORMATION_MESSAGE);
44        }
45    }
46}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
Exception in thread "main" java.lang.NullPointerException
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)
at java.lang.Double.parseDouble(Double.java:538)
at Pt.main(Pt.java:1)
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>

```

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF () Java C 4/4 PM 3/4/2025

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=Double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a==0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a"+(-b/a),JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nnhap";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",JOptionPane.INFORMATION_MESSAGE);
36            Double m=Double.parseDouble(s4);
37            Double n=Double.parseDouble(s4);
38            if(a==0)
39            {
40                if(m!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
41                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
42            }
43            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a"+(-b/a),title:"Nghiem",JOptionPane.INFORMATION_MESSAGE);
44        }
45    }
46}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
Exception in thread "main" java.lang.NullPointerException
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:116)
at java.lang.Double.parseDouble(Double.java:538)
at Pt.main(Pt.java:1)
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator>

```

Ln 1, Col 1 Spaces: 4 UTF-8 CRLF () Java C 4/4 PM 3/4/2025

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhap";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0&&b!=0)
41            {
42                if(c!=0&&d!=0)
43                {
44                    if((a*c)-(b*d)==0)
45                    {
46                        if((a*c)==0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=(d-bc)/(ad-bc)",JOptionPane.INFORMATION_MESSAGE);
50                }
51            }
52        }
53    }
54}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Users\Administrator & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Exception in thread "main" java.lang.NullPointerException  
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)  
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:110)  
at java.lang.Double.parseDouble(Double.java:538)  
at Pt.main(Pt.java:1)

P S C:\Users\Administrator <

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhap";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0&&b!=0)
41            {
42                if(c!=0&&d!=0)
43                {
44                    if((a*c)-(b*d)==0)
45                    {
46                        if((a*c)==0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=(d-bc)/(ad-bc)",JOptionPane.INFORMATION_MESSAGE);
50                }
51            }
52        }
53    }
54}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Users\Administrator & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Exception in thread "main" java.lang.NullPointerException  
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)  
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:110)  
at java.lang.Double.parseDouble(Double.java:538)  
at Pt.main(Pt.java:1)

P S C:\Users\Administrator <

J Pjava

```

1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=-b/a",JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhap";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35            s4=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",JOptionPane.INFORMATION_MESSAGE);
36            Double c=Double.parseDouble(s4);
37            String s5;
38            s5=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap d",JOptionPane.INFORMATION_MESSAGE);
39            Double d=Double.parseDouble(s5);
40            if(a!=0&&b!=0)
41            {
42                if(c!=0&&d!=0)
43                {
44                    if((a*c)-(b*d)==0)
45                    {
46                        if((a*c)==0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo nguyen",JOptionPane.INFORMATION_MESSAGE);
47                        else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
48                    }
49                    else JOptionPane.showMessageDialog(parentComponent:null,"x=(d-bc)/(ad-bc)",JOptionPane.INFORMATION_MESSAGE);
50                }
51            }
52        }
53    }
54}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

C:\Users\Administrator & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Exception in thread "main" java.lang.NullPointerException  
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)  
at sun.misc.FloatingDecimal.parseDouble(FloatingDecimal.java:110)  
at java.lang.Double.parseDouble(Double.java:538)  
at Pt.main(Pt.java:1)

P S C:\Users\Administrator <

```

1 import java.awt.*;
2 import javax.swing.*;
3 import java.util.Scanner;
4
5 public class Pt {
6     public static void main(String[] args) {
7         Scanner sc=new Scanner(System.in);
8         String s="1.Phuong trinh bac 1 mot bien\n2.Meu phuong trinh bac 2 mot bien";
9         String strnum3;
10        strnum3=xOptionPane.showInputDialog(parentComponent:null,s,title:"Option",xOptionPane.INFORMATION_MESSAGE);
11        double p=double.parseDouble(strnum3);
12        if(p==1)
13        {
14            String s1;
15            s1=xOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",xOptionPane.INFORMATION_MESSAGE);
16            Double a=Double.parseDouble(s1);
17            String s2;
18            s2=xOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",xOptionPane.INFORMATION_MESSAGE);
19            Double b=Double.parseDouble(s2);
20            if(a!=0)
21            {
22                if(b!=0) xOptionPane.showMessageDialog(parentComponent:null,message:"Vo nghiem",xOptionPane.INFORMATION_MESSAGE);
23                else xOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",xOptionPane.INFORMATION_MESSAGE);
24            }
25            else xOptionPane.showMessageDialog(parentComponent:null,"x=b/a",xOptionPane.INFORMATION_MESSAGE);
26        }
27        if(p==2)
28        {
29            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhap ";
30            String s2;
31            s2=xOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",xOptionPane.INFORMATION_MESSAGE);
32            Double a=Double.parseDouble(s2);
33            String s3;
34            s3=xOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",xOptionPane.INFORMATION_MESSAGE);
35            Double b=Double.parseDouble(s3);
36            String s4;
37            s4=xOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap c",xOptionPane.INFORMATION_MESSAGE);
38            Double c=Double.parseDouble(s4);
39            String s5;
40            s5=xOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap d",xOptionPane.INFORMATION_MESSAGE);
41            Double d=Double.parseDouble(s5);
42            double x=(-b-a)*(-b/a);
43            double y=(c-b*a)/(-b*a);
44            Result result = new Result();
45            result.x=x;
46            result.y=y;
47            result.show();
48        }
49    }
50}

```

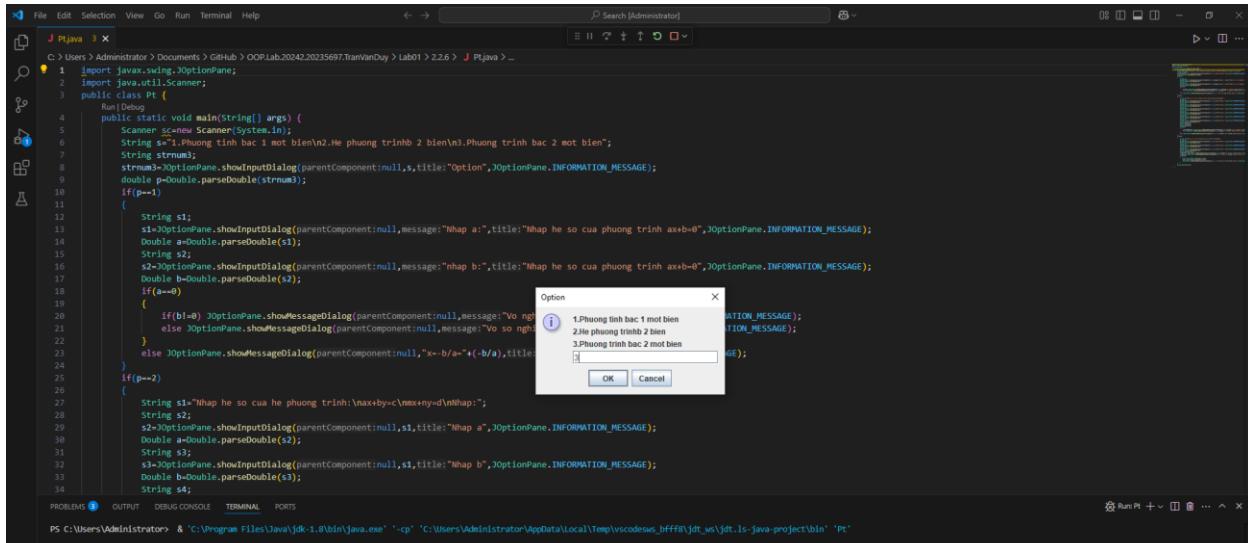
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'
Exception in thread "main" java.lang.NullPointerException
at sun.misc.FloatingDecimal.readJavaFormatString(FloatingDecimal.java:1838)
at sun.misc.FloatingDecimal.parseFloat(FloatingDecimal.java:110)
at java.lang.Double.parseDouble(Double.java:538)
at Pt.main(Pt.java:11)

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'
PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\bin' 'Pt'

Ln 1, Col 1   Spaces: 4   UTF-8   CRLF   () Java   4:43 PM   3/4/2025

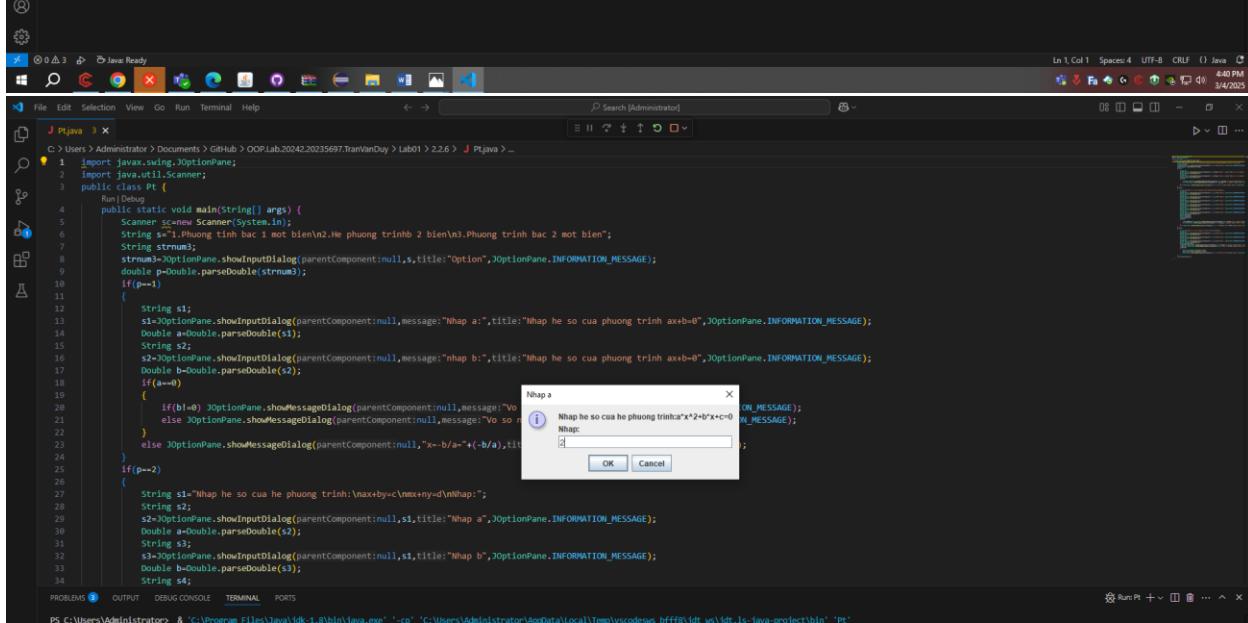
Pt bac 2:



A screenshot of the Visual Studio Code (VS Code) interface. The editor shows a Java file named `J_Ptjava` with the following code:

```
1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class Pt {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh bac 2 bien\n3.Phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=Double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap a:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhap b:",title:"Nhap he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vo ngan",JOptionPane.INFORMATION_MESSAGE);
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vo so nghiem",JOptionPane.INFORMATION_MESSAGE);
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=b/a-"+(b/a),JOptionPane.INFORMATION_MESSAGE);
24        }
25        if(p==2)
26        {
27            String s1="Nhap he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhaph:";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhap b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35        }
36    }
37 }
```

The code implements a menu system with three options: 1. Phuong tinh bac 1 mot bien, 2. He phuong trinh bac 2 bien, and 3. Phuong trinh bac 2 mot bien. If option 1 is selected, it prompts for coefficients  $a$  and  $b$ . If  $a \neq 0$ , it checks if  $b \neq 0$ ; if true, it shows a message "Vo ngan"; if false, it shows "Vo so nghiem". If  $a = 0$ , it displays the solution  $x = b/a - (b/a)$ . If option 2 is selected, it prompts for coefficients  $a$ ,  $b$ ,  $m$ , and  $n$ , and solves the system of equations  $ax+by=c$  and  $mx+ny=d$ .



A screenshot of the Visual Studio Code (VS Code) interface. The editor shows the same Java file `J_Ptjava` as the previous screenshot. A `JOptionPane` dialog box is displayed, showing the following content:

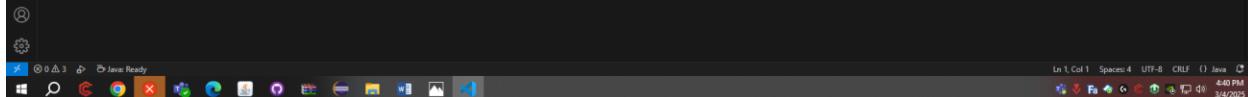
Option X

- 1.Phuong tinh bac 1 mot bien
- 2.He phuong trinh bac 2 bien
- 3.Phuong trinh bac 2 mot bien

[ ]

OK Cancel

The dialog lists three options: 1. Phuong tinh bac 1 mot bien, 2. He phuong trinh bac 2 bien, and 3. Phuong trinh bac 2 mot bien. The user has selected the first option.



A screenshot of the Visual Studio Code (VS Code) interface. The editor shows the same Java file `J_Ptjava`. A `JOptionPane` dialog box is displayed, showing the following content:

Nhap a X

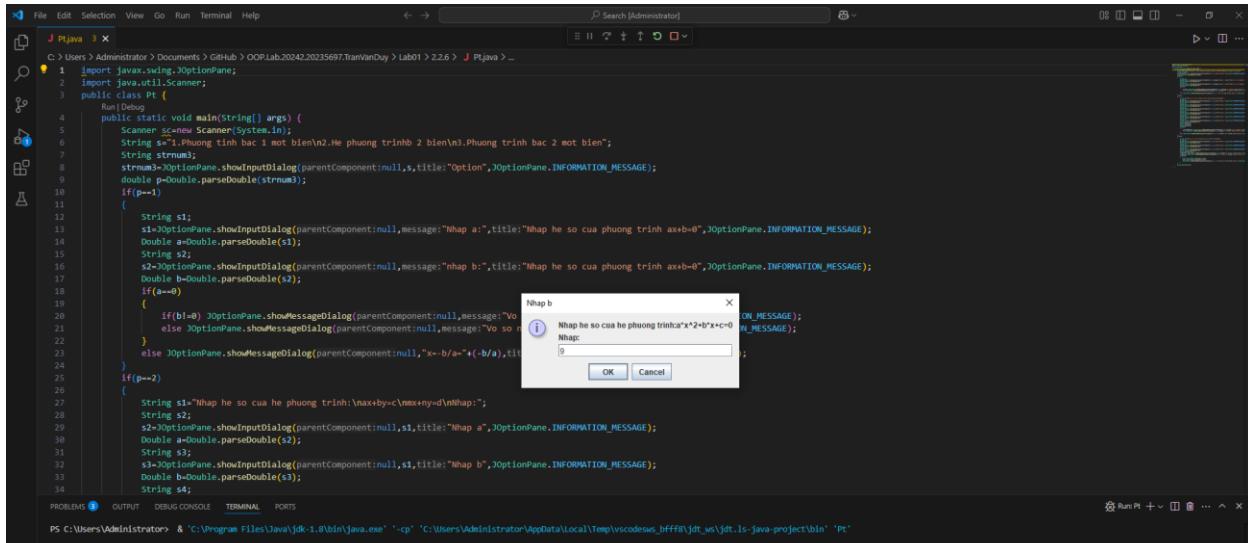
Nhap he so cua he phuong trinh:a\*x^2+b\*x+c=0

Nhaph:

[ ]

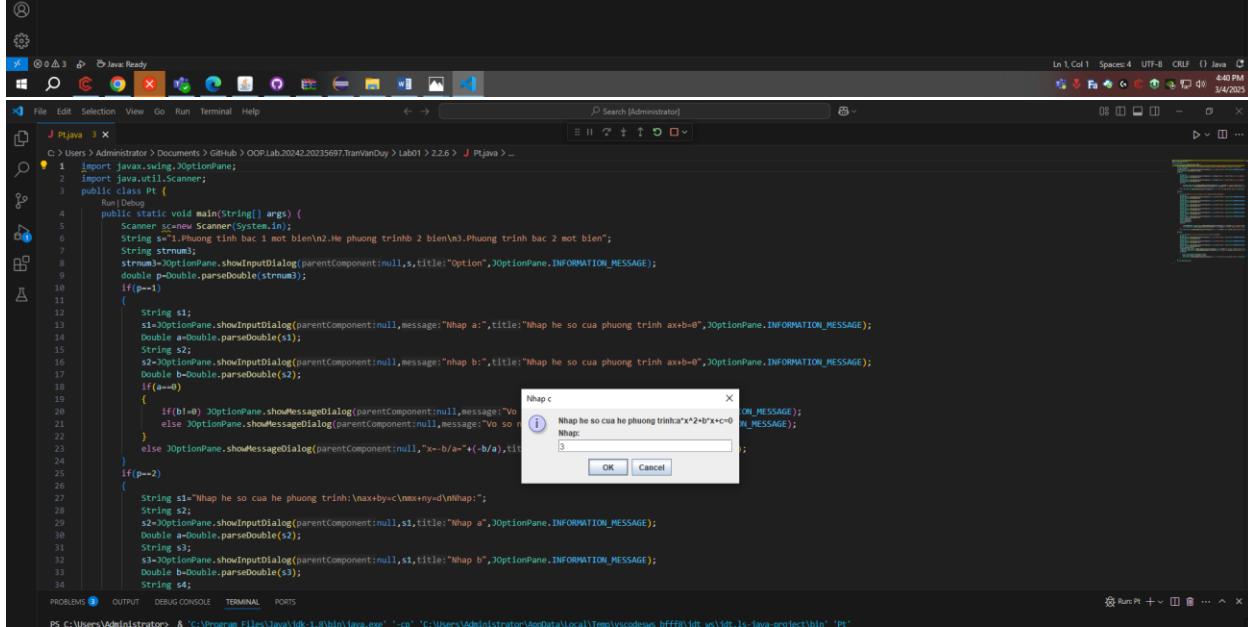
OK Cancel

The dialog is prompting for the coefficient  $a$  of the quadratic equation  $a*x^2 + b*x + c = 0$ .



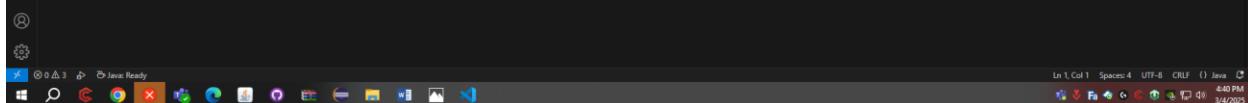
```
C:\Users\Administrator>Documents>GitHub>OOP.Lab.2024.20235697.tranVanDuy>Lab01>2.2.6> J Ptjava > ...
1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class PT {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=Double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô số nghiệm");
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô số nghiệm");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=b/a"+(b/a),title:"Kết quả");
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập ";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35        }
36    }
37 }
```

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\b1n' 'Pt'



```
C:\Users\Administrator>Documents>GitHub>OOP.Lab.2024.20235697.tranVanDuy>Lab01>2.2.6> J Ptjava > ...
1 import javax.swing.JOptionPane;
2 import java.util.Scanner;
3 public class PT {
4     public static void main(String[] args) {
5         Scanner sc=new Scanner(System.in);
6         String s="1.Phuong tinh bac 1 mot bien\n2.He phuong trinh bac 2 mot bien";
7         String strnum3;
8         strnum3=JOptionPane.showInputDialog(parentComponent:null,s,title:"Option",JOptionPane.INFORMATION_MESSAGE);
9         double p=Double.parseDouble(strnum3);
10        if(p==1)
11        {
12            String s1;
13            s1=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập a:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
14            Double a=Double.parseDouble(s1);
15            String s2;
16            s2=JOptionPane.showInputDialog(parentComponent:null,message:"Nhập b:",title:"Nhập he so cua phuong trinh ax+b=0",JOptionPane.INFORMATION_MESSAGE);
17            Double b=Double.parseDouble(s2);
18            if(a!=0)
19            {
20                if(b!=0) JOptionPane.showMessageDialog(parentComponent:null,message:"Vô số nghiệm");
21                else JOptionPane.showMessageDialog(parentComponent:null,message:"Vô số nghiệm");
22            }
23            else JOptionPane.showMessageDialog(parentComponent:null,"x=b/a"+(b/a),title:"Kết quả");
24        }
25        if(p==2)
26        {
27            String s1="Nhập he so cua he phuong trinh:\nax+by=c\nmx+ny=d\nNhập ";
28            String s2;
29            s2=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập a",JOptionPane.INFORMATION_MESSAGE);
30            Double a=Double.parseDouble(s2);
31            String s3;
32            s3=JOptionPane.showInputDialog(parentComponent:null,s1,title:"Nhập b",JOptionPane.INFORMATION_MESSAGE);
33            Double b=Double.parseDouble(s3);
34            String s4;
35        }
36    }
37 }
```

PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' '-cp' 'C:\Users\Administrator\AppData\Local\Temp\vscodews\_bfff8\jdt\_ws\jdt.ls\java-project\b1n' 'Pt'



The screenshot shows a Java development environment with the following details:

- Code Editor:** A Java file named `J_Pjava` is open. The code implements a quadratic equation solver. It uses `Scanner` to read coefficients  $a$ ,  $b$ , and  $c$ . It then calculates the discriminant  $D = b^2 - 4ac$  and based on its value, it either finds two real roots using the formula  $x = \frac{-b \pm \sqrt{D}}{2a}$  or handles the case where  $D < 0$  by displaying an error message.
- Terminal:** A terminal window at the bottom shows the command: `PS C:\Users\Administrator> & 'C:\Program Files\Java\jdk-1.8\bin\java.exe' -cp 'C:\Users\Administrator\AppData\Local\Temp\vscodews_bfff8\jdt_ws\jdt.ls-java-project\bin' 'pt'`.
- Output:** A modal dialog titled "Result" displays the output of the program. It shows two lines of text:

```
xt=0.36254139118231254
xt=-4.1374598688178875
```
- IDE Status:** The status bar at the bottom right indicates: Ln 1, Col 1 | Spaces: 4 | UTF-8 | CRLF | Java | 4:40 PM | 3/4/2025.