```
C:\java11\jdk-11.0.2\bin\java.exe "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.3.2\lib\idea_rt.jar=57052:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.3.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\alexx\IdeaProjects\JavaHomework\out\production\JavaHomework com.netcracker.homework1.Main
**********
***testCircle***
**********
Circle{radius=1.0, color='red'}
Area of circle=3.141592653589793
Circle{radius=32.0, color='red'}
Area of circle=3216.990877275948
Circle{radius=12.0, color='white'}
Area of circle=452.3893421169302
Circle{radius=12.0, color='white'}
Circle{radius=12.0, color='white'}
Is equals? true
Hashcode for circles = -310506502
========================================
**********
***testRectangle***
**********
Rectangle[length=1.0,width=1.0]
Perimeter =4.0
Area=1.0
Rectangle[length=5.0,width=3.0]
Perimeter=16.0
Area=15.0
Rectangle[length=5.0,width=3.0]
Rectangle[length=5.0,width=3.0]
Is equals? true
Hashcode for rectangles = 329269201
========================================
**********
***testEmployee***
**********
Employee{id=1, firstname='Ivan', lastName='Ivanov', salary=30000}
Name: Ivan Ivanov
```

```
35 Salary =30000
36 Annual salary =360000
37 Raising salary on 30%
38 New salary =39000
39 New annual salary =468000
40 Employee{id=1, firstname='Ivan', lastName='Ivanov',
   salary=39000}
41 Employee{id=1, firstname='Ivan', lastName='Ivanov',
   salary=30000}
42 Is equals? false
43 Hashcode for employees = -1977476153
44 ====================================
45 **************
46 ***testBook***
47 **************
48 Book{name='Thinking in Java', authors=[Author{name='
   Bruce Ekkel', email='null', gender=M}], price=1000.0
   , qty=0}
49 Name:Thinking in Java
50 Authors:Bruce Ekkel,
51 Price =1000.0
52
53 Book{name='Computer architecture', authors=[Author{
   name='John L Hennessy', email='null', gender=M},
   Author{name='David A Patterson', email='null', gender
   =M}], price=2500.0, qty=0}
54 Name:Computer architecture
55 Authors:John L Hennessy,David A Patterson,
56 Price =2500.0
57 ________________________________________
58 Book{name='Computer architecture', authors=[Author{
   name='John L Hennessy', email='null', gender=M},
   Author{name='David A Patterson', email='null', gender
   =M}], price=2500.0, qty=0}
59 Book{name='Computer architecture', authors=[Author{
   name='John L Hennessy', email='null', gender=M},
   Author{name='David A Patterson', email='null', gender
   =M}], price=2500.0, qty=0}
60 Is equals?  true
61 Hashcode for books = 1975771705
62 ====================================
```

```
 63 ******************
 64 ***testMyPoint***
 65 ******************
 66 First point: (0,0)
 67 [0, 0]
 68 Second point: (3,4)
 69 [3, 4]
 70 Distance1 =5.0
 71 Distance2 =5.0
 72 Distance3 =5.0
 73 (3,4)
 74 (3,4)
 75 Is equals? true
 76 Hashcode for points = 16434
 77 ========================================
 78 ********************
 79 ***testMyTriangle***
 80 ********************
 81 MyTriangle{v1=(0,0), v2=(0,3), v3=(4,0)}
 82 Perimeter =12.0
 83 Type of triangle: Scalene
 84 MyTriangle{v1=(0,0), v2=(0,4), v3=(4,0)}
 85 Perimeter =13.65685424949238
 86 Type of triangle: Isosceles
 87 MyTriangle{v1=(0,0), v2=(0,4), v3=(4,0)}
 88 MyTriangle{v1=(0,0), v2=(0,4), v3=(4,0)}
 89 Is equals? true
 90 Hashcode for triangles = 16729336
 91 ========================================
 92 ********************
 93 ***TestMyComplex***
 94 ********************
 95 Первое число: (3.0+9.0i)
 96 Второе число: (2.0+7.0i)
 97 Сумма =(5.0+16.0i)
 98 Разность =(1.0+2.0i)
 99 Произведение =(-57.0+39.0i)
100 Частное =(1.3018867924528301-0.05660377358490566i)
101 (2.0+7.0i)
102 (2.0+7.0i)
103 Is equals? true
```

```
104 Hashcode for numbers = 1835969
105 ========================================
106 **********************
107 ***TestMyPolinomial***
108 **********************
109 Первый полином: 5.0x^4+8.0x^2+3.0
110 Степень полинома = 4
111 Значение при x=1: 16.0
112 Второй полином: 5.0x^5+3.0x^3+9.0x
113 Степень полинома = 5
114 Значение при x=1: 17.0
115 Сумма полиномов: 5.0x^5+5.0x^4+3.0x^3+8.0x^2+9.0x+3.
    0
116 Произведение полиномов: 25.0x^9+55.0x^7+84.0x^5+81.
    0x^3+27.0x
117 5.0x^5+3.0x^3+9.0x
118 5.0x^5+3.0x^3+9.0x
119 Is equals? true
120 Hashcode for polinimials = 841235265
121 ========================================
122 **************
123 ***TestBall***
124 **************
125 Ball[(0.0,0.0), radius=1, speed=(0.70710677,0.
    70710677)]
126 Мяч делает ход...
127 Ball[(0.70710677,0.70710677), radius=1, speed=(0.
    70710677,0.70710677)]
128 Мяч делает ход...
129 Ball[(1.4142135,1.4142135), radius=1, speed=(0.
    70710677,0.70710677)]
130 Мяч поменял направление по горизонтали и делает ход
    ...
131 Ball[(0.70710677,2.1213202), radius=1, speed=(-0.
    70710677,0.70710677)]
132 Мяч поменял направление по вертикали и делает ход...
133 Ball[(0.0,1.4142134), radius=1, speed=(-0.70710677,-
    0.70710677)]
134 Ball[(0.0,1.4142134), radius=1, speed=(-0.70710677,-
    0.70710677)]
135 Ball[(0.0,0.0), radius=1, speed=(0.70710677,0.
```

```
70710677)]
Is equals? false
Hashcode for balls = 61937776
=======================================
******************
***TestContainer***
******************
Container[(0,0),(5,5)]
Ball[(2.5,2.5), radius=2, speed=(0.0,0.0)]
Мяч в контейнере? = true
-----------------------------------------
Container[(0,0),(5,5)]
Ball[(2.5,2.5), radius=3, speed=(0.0,0.0)]
Мяч не влез в контейнер '_'
Мяч в контейнере? = false
-----------------------------------------
Container[(0,0),(5,5)]
Ball[(2.5,2.5), radius=2, speed=(0.70710677,0.
70710677)]
Мяч в контейнере? = true
Мяч делает ход...
Ball[(3.2071068,3.2071068), radius=2, speed=(0.
70710677,0.70710677)]
Мяч в контейнере? = false
-----------------------------------------
Container[(0,0),(5,5)]
Container[(0,0),(5,5)]
Is equals? true
Hashcode for containers = 15704667
=======================================
THE END

Process finished with exit code 0

```