

HW# 1

POWERBALL

```
class PowerBall{
    private int[] winningNumber ;
    private int[] ticketNumber ;
    private long cash ;
    private static final IntUtil u = new IntUtil();

    public void check()
    {

        int count = 0;
        boolean powerball;
        for (int i = 0; i<winningNumber.length; i++)
        {
            for(int j=0; j<ticketNumber.length; j++)
            {
                if(winningNumber[i]==ticketNumber[j])
                {
                    count ++;
                }
            }
        }
        if(winningNumber[5] == ticketNumber[5] && (count==5))
        {
            System.out.println("You won jackport");
            cash = 10000000000000L;
        }
        else
        {
            if(winningNumber[5] == ticketNumber[5])
            {
                cash = 4;
            }
            else if(count==1 && (winningNumber[5] == ticketNumber[5]))
            {
                cash = 4;
            }
            else if(count==2 && (winningNumber[5] == ticketNumber[5]))
            {
                cash = 7;
            }
            else if(count==3 && (winningNumber[5] == ticketNumber[5]))
            {
                cash = 100;
            }
            else if(count ==4 && (winningNumber[5] == ticketNumber[5]) )
            {
                cash = 50000;
            }
        }
    }
}
```

```

        else if(count ==5 && (winningNumber[5] == ticketNumber[5]))
        {
            cash = 1000000;
        }
        else if(count == 3)
        {
            cash = 7;
        }
        else if(count == 4)
        {
            cash = 100;
        }
        else if(count == 5)
        {
            cash = 1000000;
        }
    }

    //System.out.println("Out of 10000 times you win " + cash + "$") ;
}
PowerBall(int[] w, int [] t)
{
    winningNumber = w ;
    ticketNumber = t ;
    cash = 0 ;
    check() ;
}

private static void test1() {
    int[] w = {4,8,19,27,24,10} ;
    {
        int [] n= {4,8,19,27,24,10} ;
        PowerBall x = new PowerBall(w,n);
    }
    {
        int [] n= {24,27,19,8,4,10} ;
        PowerBall x = new PowerBall(w,n);
    }
    {
        int [] n= {24,27,19,8,4,5} ;
        PowerBall x = new PowerBall(w,n);
    }
    {
        int [] n= {124,127,119,18,14,10} ;
        PowerBall x = new PowerBall(w,n);
    }
    {
        int [] n= {124,127,119,18,14,5} ;
        PowerBall x = new PowerBall(w,n);
    }
    {
        int [] n= {124,127,119,18,14} ;
        PowerBall x = new PowerBall(w,n);
    }
    {
        int [] n= {124,124,19,119,18,14} ;
        PowerBall x = new PowerBall(w,n);
    }
}

```

```

    }
}

private static void testRandom() {
    int[] w = {4,8,19,27,24,10} ;
    int max = 10000 ;
    long c = 0 ;
    for (int i = 0; i < max; ++i) {
        int [] n = u.generateRandomNumber(6, true, 1, 99);
        PowerBall x = new PowerBall(w,n);
        c = c + x.cash;
        //System.out.println("Out of " + max + " times you win " + c + "$") ;
    }
    System.out.println("Out of " + max + " times you win " + c + "$") ;
}

public static void main(String[] args) {
    System.out.println("PowerBall.java");
    testRandom();
    System.out.println("Done");
}
}

```

OUTPUT:

