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HW-1

POWERBALL.java

**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 = 1000000000000L;

}

**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:

