1. **Divisors**

public class Divisors

{

public static void main(String[] args)

{

// Declares integer

int num = Integer.parseInt ( args[0] );

for ( int i = 1; i <= num; i ++ )

{

//checks is it a divisor

if ( num % i == 0 )

System.out.println( i );

}

}

}

1. **Reverse**

לבדוק שוב בגלל האמצע!!!

public class Reverse

{

public static void main(String[] args)

{

// Declares Strings

String original = args [0];

String reversed = "";

int middle = original.length() / 2;

for (int i = original.length() - 1 ; i >= 0; i-- )

{

// builds the string reversed

reversed += original.charAt ( i );

}

System.out.println ( reversed );

System.out.println ( "The middle character is " + original.charAt ( middle ) );

}

}

1. **InOrder**

public class InOrder

{

public static void main(String[] args)

{

//generates the first number that should be printed anyway

int firstNum = (int) ( Math.random()\* 10 );

System.out.print (firstNum);

// generates the next number

int randomNum = (int) ( Math.random()\* 10 );

while ( firstNum <= randomNum )

{

System.out.print ( " "+ randomNum );

// saves the last number for the next check of the loop

firstNum = randomNum;

//generates new number

randomNum = (int) ( Math.random()\* 10 );

}

}

}

1. **Perfect**

public class perfect

{

public static void main(String[] args)

{

// Declares integer

int num = Integer.parseInt ( args[0] );

String endOfProgram = ( num + " is a perfect number since " + num + " = 1" );

// every number can be divided by 1

int sum = 1;

for ( int i = 2; i < num; i ++ )

{

//checks is it a divisor

if ( num % i == 0 ) {

endOfProgram += " + " + i;

// in order to see if it equals

sum += i;

}

}

if ( sum == num )

System.out.println ( endOfProgram );

else

System.out.println ( num + " is not a perfect number" );

}

}

1. **DamkaBoard**

public class DamkaBoard

{

public static void main(String[] args)

{

// Declares integer

int n = Integer.parseInt ( args[0] );

for ( int i = 0; i < n; i++ )

{

// every second row starts with space

if ( i % 2 == 1 )

System.out.print ( " \* " );

for ( int j = 0; j < n - 1; j++ )

{

System.out.print ( "\* " );

}

if ( i % 2 == 0 )

System.out.print ( "\* " );

// next row

System.out.println (" ");

}

}

}

1. **OneOfEach**

public class OneOfEach

{

public static void main(String[] args)

{

boolean isGirl = false;

boolean isBoy = false;

int count = 0;

while ( !isBoy || !isGirl )

{

// the int will be 1 or 0

int random = (int) ( Math.random () + 0.5 );

if ( random == 1 ) {

isGirl = true;

System.out.print ( "g " );

}

else {

isBoy = true;

System.out.print ( "b " );

}

// counts the amount of children

count ++;

}

System.out.println ( " You made it... and now you have " + count + " children." );

}

}

1. **OneOfEachStats1**

**לבדוק!!!**

public class OneOfEachStats1

{

public static void main(String[] args)

{

// Declares integer

int T = Integer.parseInt ( args[0] );

int family2 = 0;

int family3 = 0;

int family4orMore = 0;

double average = 0;

// for each family

int count = 0;

for ( int i = 0; i < T; i ++ )

{

// each family

boolean isGirl = false;

boolean isBoy = false;

while ( !isBoy || !isGirl )

{

// the int will be 1 or 0

int random = (int) ( Math.random () + 0.5 );

isGirl = ( random == 1 );

isBoy = (random == 0 );

count ++;

}

// adds to the general counts

if ( count == 2 )

family2 ++;

if ( count == 3 )

family3 ++;

if ( count >= 4 )

family4orMore ++;

average += count;

}

average = average / T ;

System.out.println ( "Average: " + average + " children to get at least one of each gender." );

System.out.println ( "Number of families with 2 children: " + family2 );

System.out.println ( "Number of families with 3 children: " + family3 );

System.out.println ( "Number of families with 4 or more children: " + family4orMore );

int mostCommon = Math.max ( family2, Math.max ( family3, family4orMore ) );

if ( mostCommon == family2 )

System.out.println ( "The most common number of children is 2." );

else if ( mostCommon == family3 )

System.out.println ( "The most common number of children is 3." );

else

System.out.println ( "The most common number of children is 4 or more." );

}

}

1. **OneOfEachStats (final)**