עבודה במחשבים

שקד קודמן קולרן – י"א 2

תרגיל 1:

```java
import java.util.*;

public class Ex1
{
    static Scanner reader = new Scanner(System.in);

    // Read Int
    public static int NextInt(String message)
    {
        System.out.print(message);
        return reader.nextInt();
    }

    // Func
    public static int multi(int a, int b)
    {
        // returns the multiplication of two given numbers
        int result = 0;
        for (int i = 0; i < b; i++)
        {
            result += a;
        }

        return result;
    }

    // MAIN //
    public static void main(String[] args)
    {
        int num = NextInt("Enter a number: ");
        int result = 1;

        while (num != 0)
        {
            result = multi(result, num);

            num = NextInt("Enter a number: ");
        }

        System.out.println("The final result is " + result);
    }
}
```

עבודה במחשבים

שקד קודמן קולרן – י"א 2

תרגיל 2:

```
public class Ex2
{
    // Math.Random
    public static int Random(int a, int b)
    {
        if (a > b)
            return (int)(Math.random() * (a - b + 1)) + b;

        return (int)(Math.random() * (b - a + 1)) + a;
    }

    // Func
    public static char kod(int a, int b)
    {
        // with a given two numbers,
        // if the first is bigger, returns 'p',
        // if the second is bigger returns 'n'
        // and if they are equal returns 'z'
        if(a > b)
            return 'p';
        else if (a == b)
            return 'z';

        return 'n';
    }

    // MAIN //
    public static void main(String[] args)
    {
        for (int i = 0; i < 8; i++)
        {
            int num1 = Random(-100, 100), num2 =
Random(-100, 100);
            System.out.print(kod(num1, num2) + ",");
        }
    }
}
```

עבודה במחשבים

שקד קודמן קולרן – י"א 2

תרגיל 3:

```java
import java.util.*;

public class Ex3
{
    static Scanner reader = new Scanner(System.in);

    // Read Int
    public static int NextInt(String message)
    {
        System.out.print(message);
        return reader.nextInt();
    }

    // Func
    public static boolean specialNum(int num)
    {
        // returns true if the number given is special, else
returns false
        int timesFour = num * 4;
        int reverseNum = 0;

        while (num != 0)
        {
            int remainder = num % 10;
            reverseNum = reverseNum * 10 + remainder;
            num = num/10;
        }

        if (reverseNum == timesFour)
            return true;
        return false;
    }

    // MAIN //
    public static void main(String[] args)
    {
        int count = 0, countTrue = 0;
        int num = NextInt("Enter a pos number: ");

        while (num > 0)
        {
            if (specialNum(num))
            {
                count++;
                countTrue++;
            }
            else
                count++;

            num = NextInt("Enter another num: ");
        }

        System.out.println("The number of numbers entered is
" + count + "\nand the number of numbers that are special is
" + countTrue);
    }
}
```

עבודה במחשבים

שקד קודמן קולרן – י"א 2

תרגיל 4:

```
public class Ex4
{
    public static boolean surprisingNum(int num)
    {
        // returns true if the number is surprising, else
returns false
        int digit1 = num / 1000;
        int digit2 = num / 10 % 100;
        int digit4 = num % 10;

        if ((digit1 == digit4) && (Math.pow(digit4, 2) ==
digit2))
            return true;
        return false;
    }

    // MAIN //
    public static void main(String[] args)
    {
        for (int i = 1000; i < 10000; i++)
        {
            if (surprisingNum(i))
                System.out.println(i);
        }
    }
}
```