

PASSWORD GENERATOR PROGRAM

A project assignment has been prepared in order to reinforce your knowledge of the Introduction to Computer Programming course you took last semester and to work in this field during the semester break. The project assignment is shown step by step as separate programs in order to fully assimilate the concepts. It is important that you do the coding parts by following these steps.

Program 1

A Password Generation Program will be written with Java language

- The password to be generated will be a 3-digit number.

In this way, write the Java Program that will generate 100 different passwords and list them on the screen.

(Calculate how many different passwords can be generated? Do not write a program, just calculate it mathematically)

Program 2

A Password Generation Program will be written with Java language

- The password generated will contain 3 random Uppercase characters.

In this way, write the Java Program that will generate 100 different passwords and list them on the screen.

(Calculate how many different passwords can be generated? Do not write a program, just calculate it mathematically)

Program 3

A Password Generation Program will be written with Java language

- The password to be generated will consist of 9 characters
- 1-2-3 characters Random Uppercase
- 4-5-6 characters Random Lowercase
- 7-8-9 characters will be Digits

In this way, write the Java Program that will generate 100 different passwords and list them on the screen.

Program 4

A Password Generation Program will be written with Java language

The password to be generated will consist of 12 characters

- 1-2-3 characters Random Uppercase
- 4-5-6 characters Random Lowercase
- 7-8-9 characters Digit
- 10-11-12 characters will be all characters that are not uppercase, lowercase and numbers in the ASCII table between the 33rd-126th characters

In this way, write the Java Program that will generate 100 different passwords and list them on the screen.

Program 5

A Password Generation Program will be written with Java language

- The password to be generated will consist of 15 characters
- At least 3 characters Random Uppercase (These characters don't have to be next to each other)
- At least 3 characters Random Lowercase (These characters don't have to be next to each other)
- At least 3 characters Digits (These characters do not have to be next to each other)
- At least 3 characters in the ASCII table will be between the 33rd and 126th characters and all characters that are not uppercase, lowercase and numbers

In this way, write the Java Program that will generate 100 different passwords and list them on the screen.

(Calculate how many different passwords can be generated? Do not write a program, just calculate it mathematically)

The number of each character type should be written next to the generated passwords

Sifre 12 : Xa{92;D\$B54#w5t 3 (X,D,B) – 3(a,w,t) – 5(9,2,5,4,5)-4({,;, \$, #)

Program 6

In the above option

Write each sub-component of the program as separate sub-programs/methods?

For example

```
password[0] = RandomGenerateCase();  
password[7] = GenerateRandomSymbol();  
password[5] = GenerateRandomDigits();  
password[4] = RandomGenerateLowerCase();
```

Program 7

Update your program to read every critical data in the password generation program you have written.

1. Read how many characters the password will consist of from the keyboard
2. Read the minimum number of digits in the password from the keyboard
3. Read from the keyboard how many lowercase letters will be at least in the password
4. Read the minimum number of capital letters in the password from the keyboard
5. Read from the keyboard how many symbols will be at least in the password
6. If there is a discrepancy between the data you read above, please print an error message and request this data again? (Let the reason for the error be printed on the screen)

NOTE: All programs will be requested from you as the homework of the second week of the Advanced Programming Course that will be opened next semester.

Each program will be saved as a separate file.

All programs (7 pieces) will be sent as a zip file.

The main one is the latest program.