# HACETTEPE UNIVERSITY DEPARTMENT OF COMPUTER ENGINEERING BBM104



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Subject: Calorie Calculation for Healty Life

Programming Language: Java

### 1. Main Goal of the Assignment

The main goal of the assignment is to gain knowledge on basic JAVA programming. Thus having knowledge about how to use on variables, loops, string operations, file read and write operations. Aim is to gain practicality

#### 2. What Do You Use

I created 4 class(main,food,people,sport). I introduced the inputs to the system for solving problem. Then I created a empty output file. I defined the required variables. Then Main.java started reading the files with while loop. Erroneous characters(char[] badChar) are deleted when input files are read. Objects were created by reading the files and stored in the arrays. When the object inputs to be read are finished, the input specified by the user starts to read. The necessary actions are taken and the result is recorded in monitoring.txt

# 3. Explain Your Data Structure

I used classes for store inputs informations .

This people class contains 7 int variables(personID, weight, height, dateOfBirth, caloriestaken=0, calorisburned=0, kullanilan=0),2 String variables(name,gender).

This food class contains 2 int variables(foodID,calorieCount),1 String variable(nameofFood).

This sport class contains 2 int variables(sportID,calorieBurned),1 String variable(nameOfSport).

I stored all the objects in the arrays.

## 4. Explain your code

#### public static String[] harf\_silme(String[] splitlenmis\_satir):

this function deletes meaningless characters in the line while reading object entries

#### public static long gunluk\_kalori\_ihtiyaci(people gelen\_insan):

This function calculates the calories that people's daily needs

**public static void main(String[] args ):** Run the program .This function does read input files, creates write output file, creates objects and hides in arrays. Then main function reads the command.txt. it processes the required objects with the information given in the command.txt. function finish the program.

# 5. Give your detailed algorithm step by step

Firstly main function reads input files and delete meaningless characters in line. Then main function creates objects , stores in the arrays. 3 empty objects are defined (people, food, sport). Determine the 3 objects with the information given in command. txt then process the specified objects. if the line contains printList, all processed human objects are saved in monitoring. txt. if the line contains print (id), the processed human object is saved in monitoring. txt. Finally, the Scanner and PrintWriter functions are turned off and the the program ends.