

# REPORT

In this assignment, we are expected to gain knowledge on basic Java programming. We are expected to learn and get use to with variables , loops , string operations , file read and write operations, classes, objects, methods. Also we are expected to learn coding standards and use them in our assignments. For me, i have learned a lot during this assignment and it really helped me to understand these important topics.

When i first saw the pdf about the assignment, i thought using multiple classes to perform these operations because they are more than one type. This is why i created 4 classes. One for people one for foods and one for the sports. Each holds its own attributes, methods. Then i created 3 arrays to store my elements in their unique class arrays.

For example food array stores foods that are created in food class but i am using them in main class. Arrays are making it possible to use my objects that are stored in arrays.

After making my arrays i read the command file line by line so that i can perform what command file wants from me. And while doing that i stored commands into another array because i realised that when we printLines we print them in order to their command order. After that i performed what command file wants from me. I have updated people's attributes after they eat food or do sport and i also updated their calorie gap. By doing that they are always updated and if command line wants to print specific people's attributes they are ready to be printed. While doing that, i am using methods, classes , objects every time. My methods are such as calculate calorie needed for person , eat food , do sport , remove duplicate values in array etc... The reason i use methods is they are less errorable , easier to use and they are usable more than one times. And it looks good and coding standards are commends the use of methods too. I am updating attributes of people after they perform some actions , i am

calling the right method for the right activities and updating peoples attributes after the method calls.

My detailed algorithm starts with creating essential classes for text files. Because people, food, sport have different attributes and they have different methods so they have their own classes. After creating their classes, i create new 3 arrays just to store their objects which i am going to read from text files. After reading text files one by one i created new objects for every text and stored them into their arrays. Than i have created another array just to store commands in command text file. The reason why i am doing this is when we print List command arrives we just print them in order to their call in command.txt so this is why i store them. But there is a one problem there are duplicate elements in my command array so i created another method to remove these duplicate ones. In this method i search for same values and after that i create another array which length is only original values and i copy these values into that array there i have array with original values. When the print list command comes i take the first element in original value array search the id of the first original value and print it's attributes in right order. After that i took commands one by one and perform the right calculations for them. For example if command is eat, i update the attributes of person who eats, i calculate its calorie gap. Same with the sport too. After doing that I have everything updated and ready to be printed. When print(x) comes i subslice the given string from six to length-one and i translate it to a integer value and search that value in my people array and i print that person's already updated attributes. I print starts and the end of every line except the line that is the last line. To do this i created a method that return the size of the command text. So if the command that i am going to print is bigger than the size of the command text i dont print the stars and i end the loop there. This is how i handled that part. I also have methods for foods and sports. I have do sport and eat food methods , calorie gap method, calorie need for every gender etc... This is how my algorithm looks like.