COMP 1029 – Programming Paradigms
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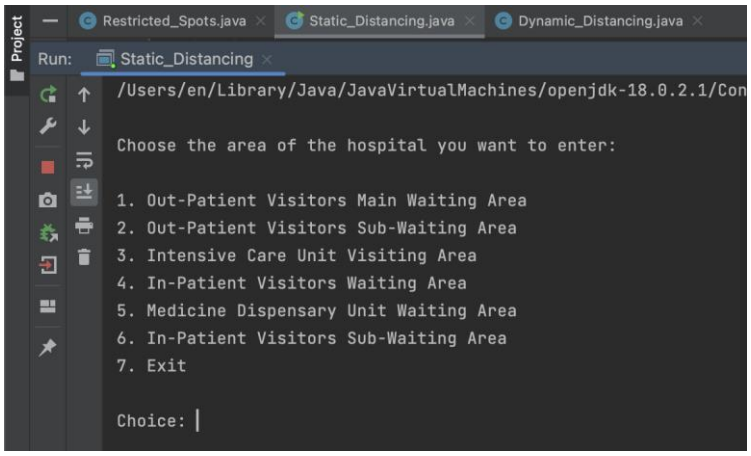
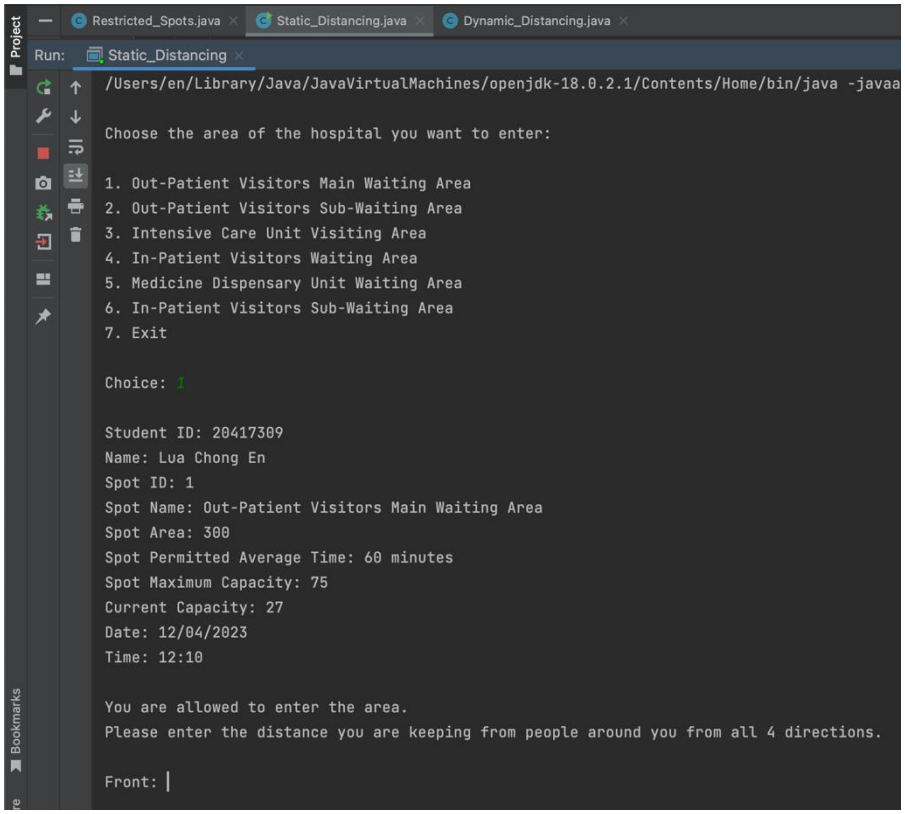
Screenshots of Output

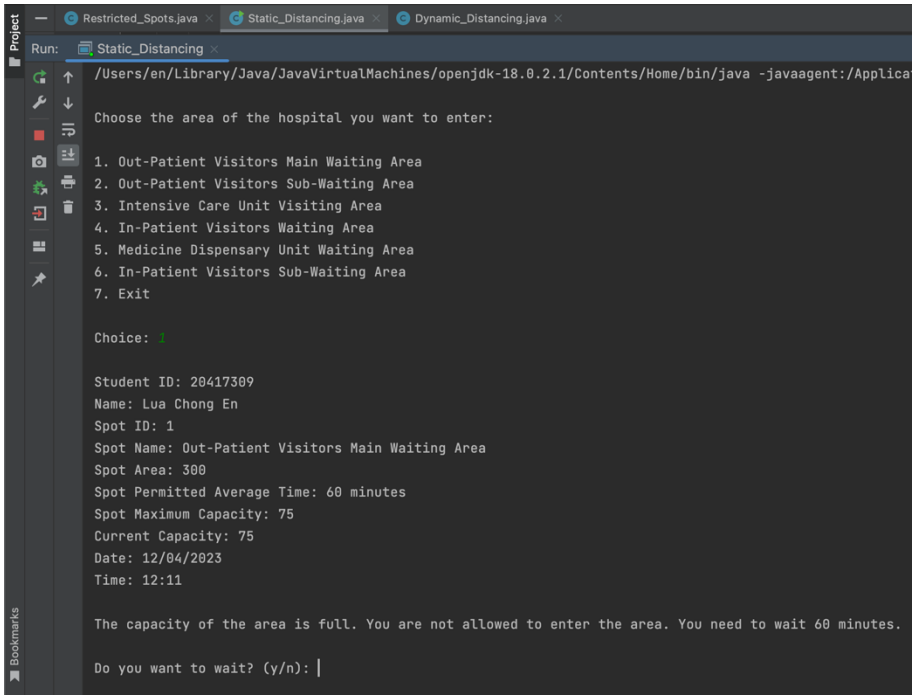


Screenshot 1: After starting the program, the 7 choices of the switch will be printed and beside Choice, the user will be prompted for their input.

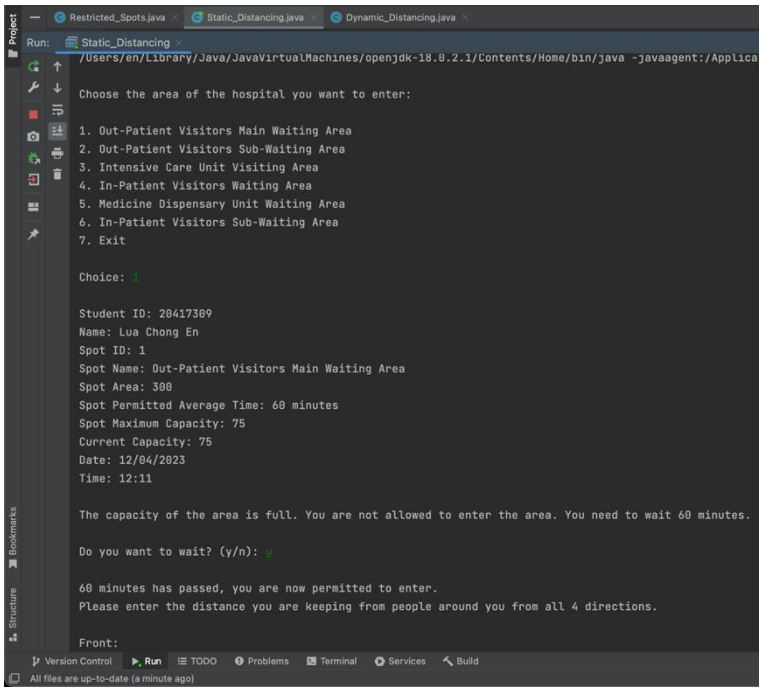


Screenshot 2: After the user enters their choice, the properties of the Area will be printed alongside current date, time, and Student ID and Name. The property of Area is Spot ID, Spot Name, Spot Area, Spot Permitted Average Time, Spot Maximum Capacity and Current Capacity. The current capacity number is generated from the random number generator

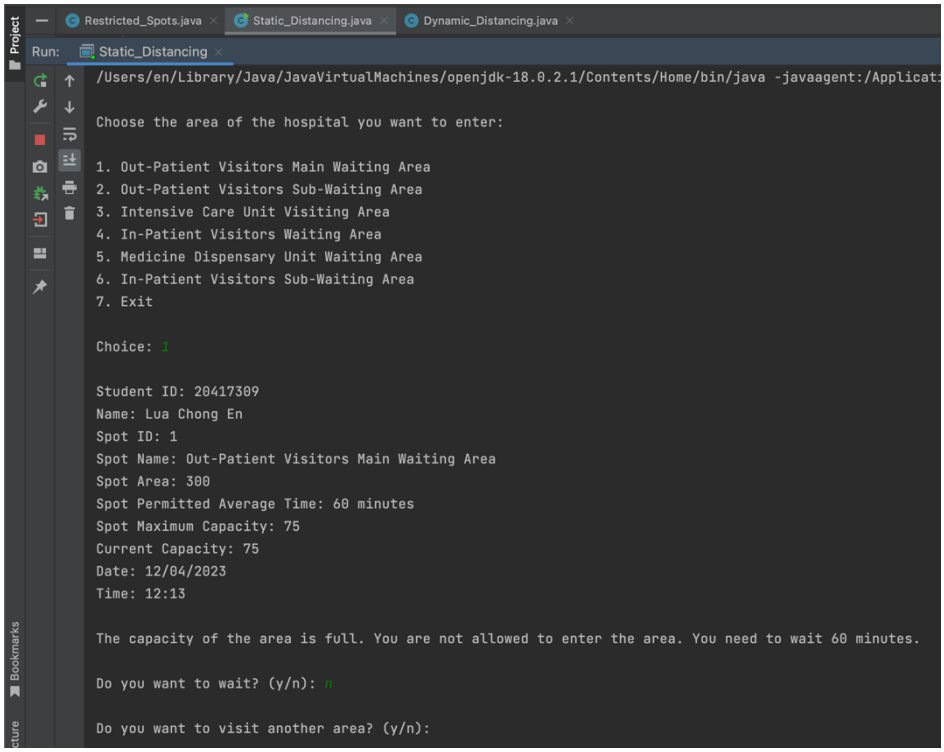
and because it is lower than the Spot Maximum Capacity, the user is allowed to enter. The user will then be prompted to enter the distances of people around them from 4 directions.



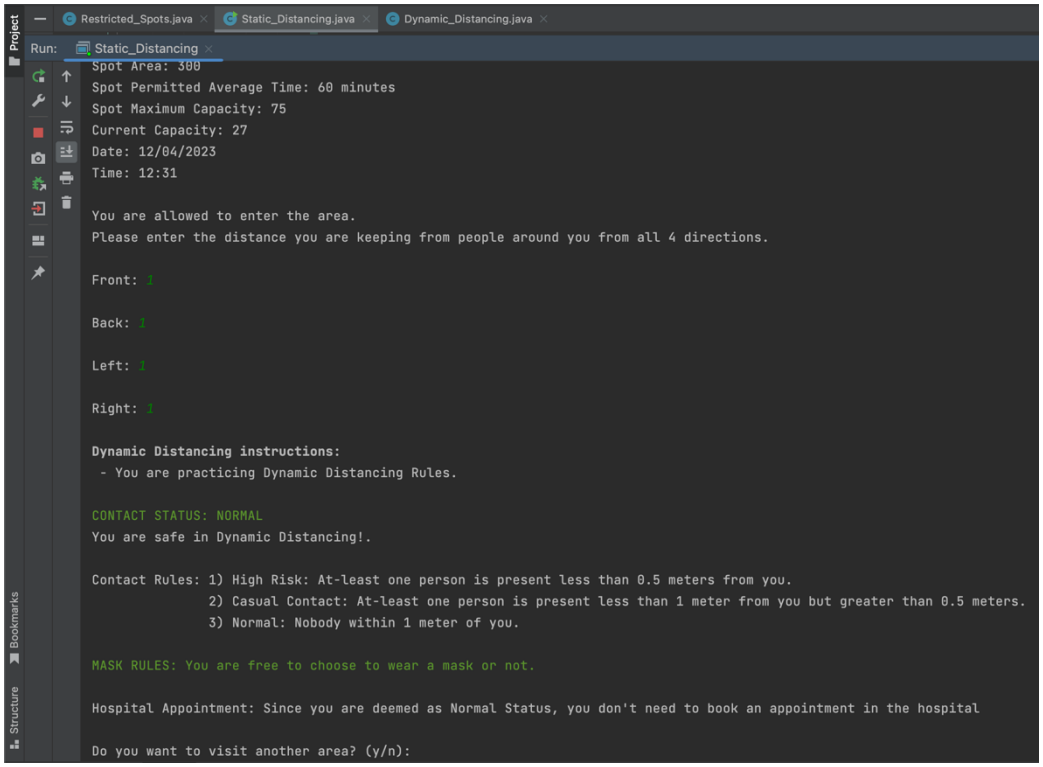
Screenshot 3: However, given that the Current Capacity number which is randomly generated is the same as the Spot Maximum Capacity, it means that the Area is full, and the user will not be allowed to enter. Instead, the user will be asked to wait the Spot Permitted Average Time, the user will be prompted for their response.



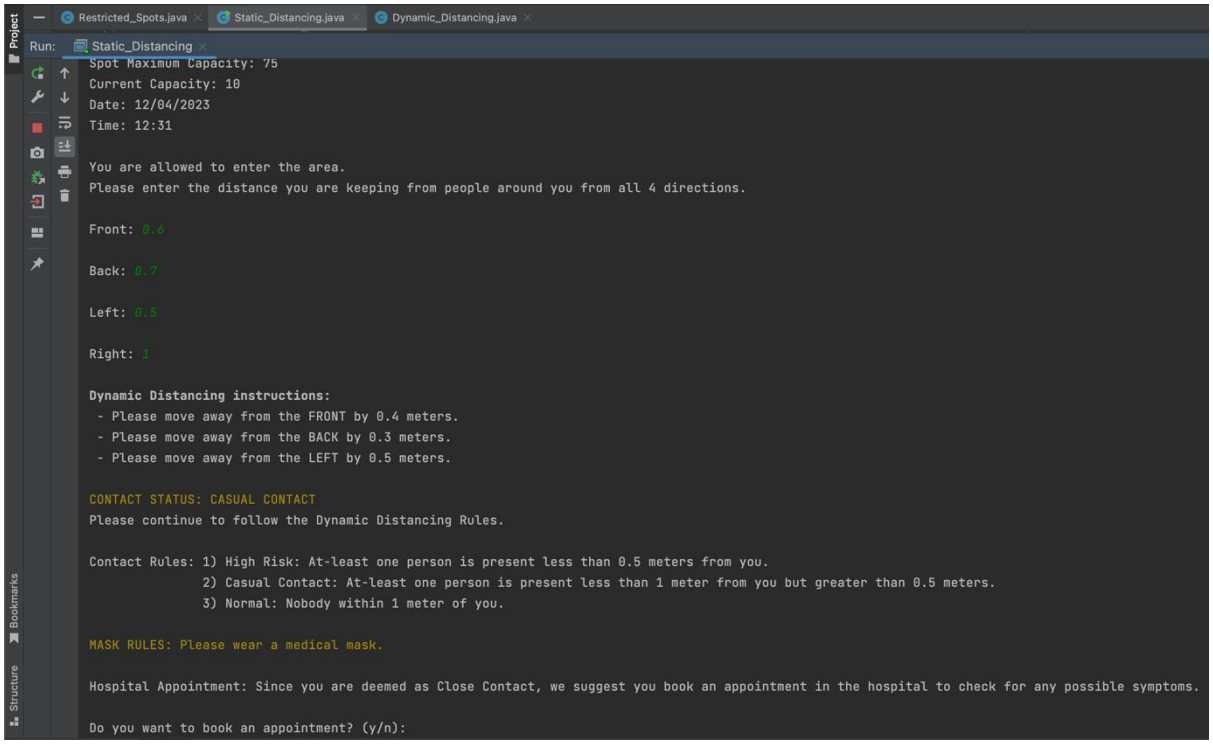
Screenshot 4: If the user types ‘y’ or ‘Y’ which means yes and they want to wait, the system will assume that the Spot Permitted Average Time has passed, and the user will be permitted to enter. Then the system will ask the user to enter the distances of people around them from 4 directions.



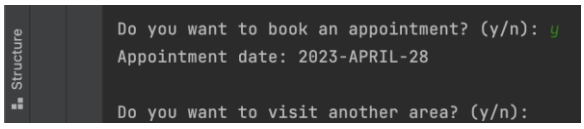
Screenshot 5: However, If the user does not choose to wait and types in ‘n’, then the user will not enter the area but will be prompted again whether they want to visit another area in the hospital. Entering ‘y’ or ‘Y’ will display the 7 choices again while entering ‘n’ will exit the program.

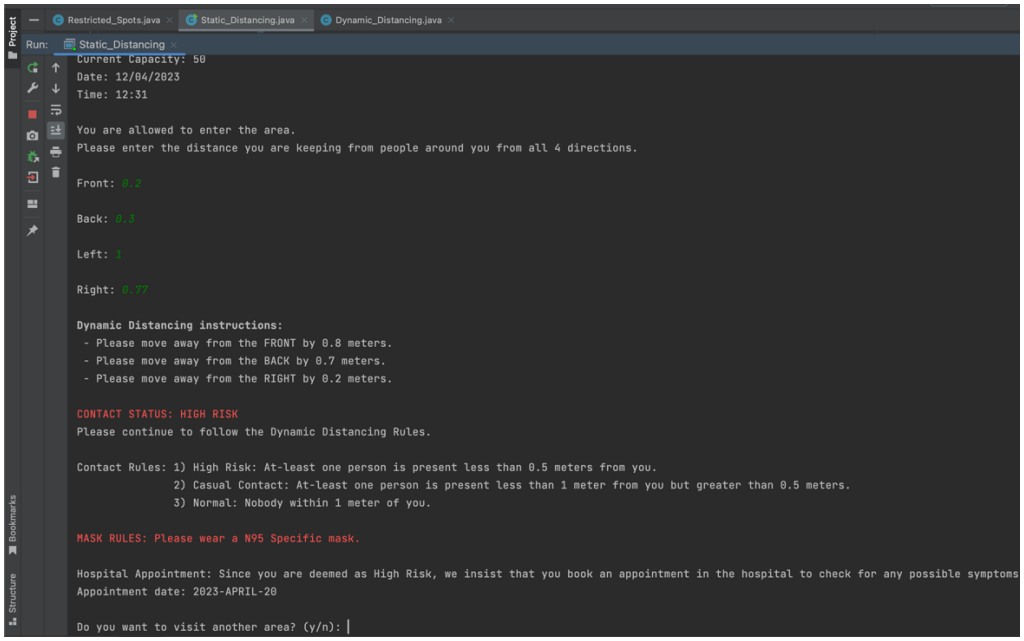


Screenshot 6: If the user enters 1 or greater as the distance for all 4 directions, then their Contact Status will be deemed as Normal and 'You are safe in Dynamic Distancing' will be printed. The relevant contact rules are also displayed, and (extraordinary features) Mask Rules will be displayed and because the user's contact status is Normal then the user can choose to wear a mask or not. Then because the user's contact status is Normal, no hospital appointment will be required. The user will then be prompted if they want to enter another area of the hospital.



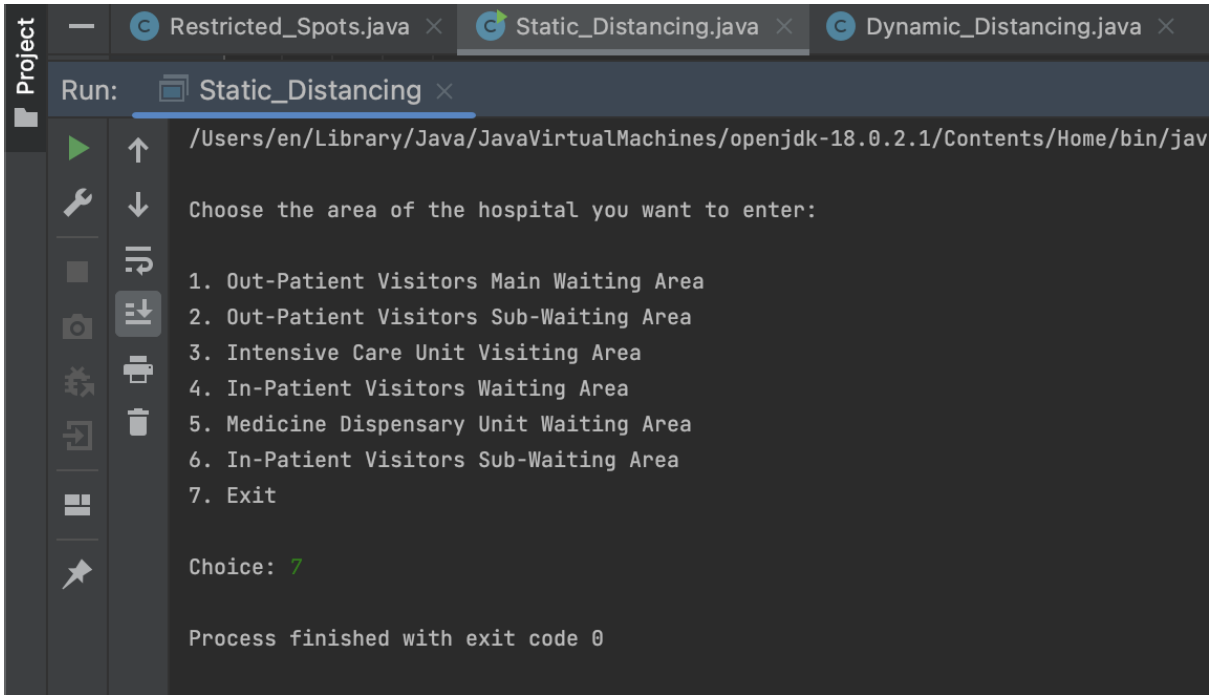
Screenshot 7: If the user enters 0.5 or greater but less than 1 meter as the distance for all 4 directions, then their Contact Status will be deemed as Casual Contact and 'Please continue to follow the Dynamic Distancing Rules' will be printed. The relevant contact rules are also displayed, and (extraordinary features) Mask Rules will be displayed and because the user's contact status is Casual Contact then the user will be asked to wear a medical mask. Then because the user's contact status is Casual Contact, the program will suggest the user to book a hospital appointment to check for any symptoms. If the user enters 'y' or 'Y' (SCREENSHOT BELOW), a random date will be generated, and it'll be the appointment date for the user. If the user enters 'n' then no appointment will be created. The user will then be prompted if they want to enter another area of the hospital.



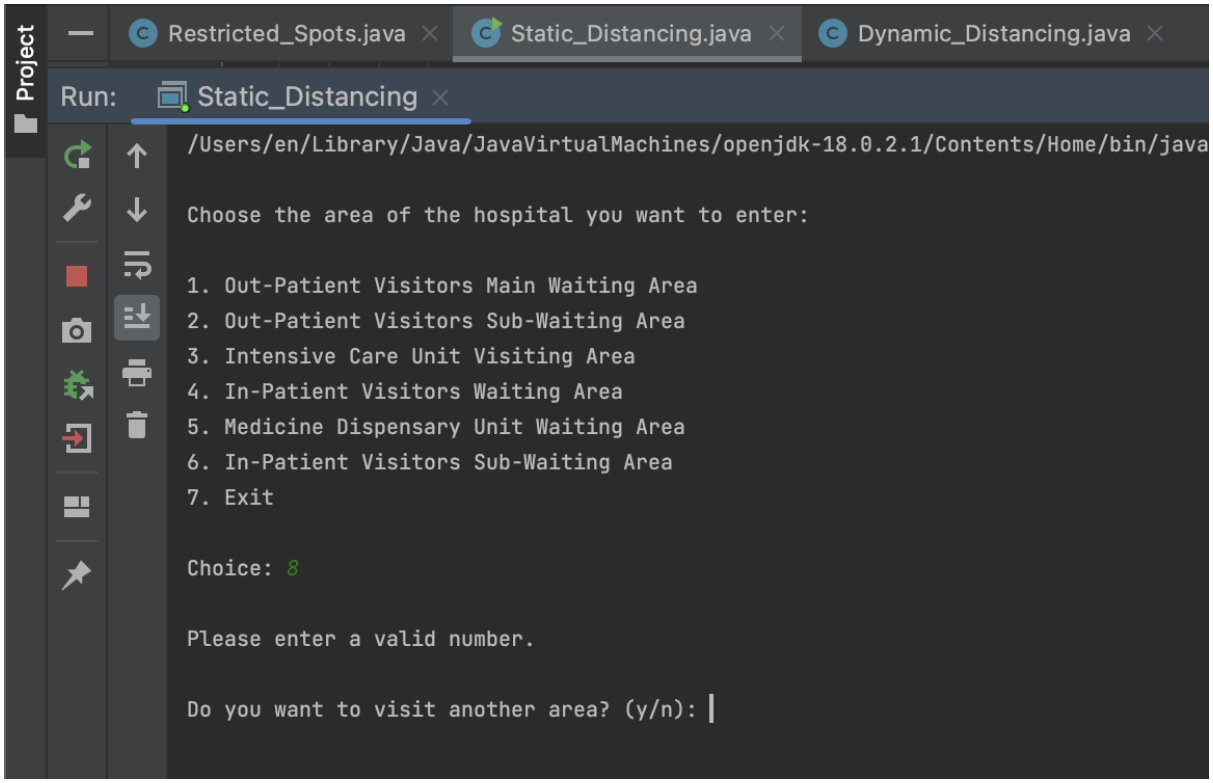


Screenshot 8: If the user enters 0.5 or lower as the distance for all 4 directions, then their Contact Status will be deemed as High Risk and 'Please continue to follow the Dynamic Distancing Rules' will be printed. The relevant contact rules are also displayed, and (extraordinary features) Mask Rules will be displayed and because the user's contact status is High Risk then the user will be asked to wear a N95 mask. Then because the user's contact status is High Risk, the program will automatically create a random appointment date for the user. The user will then be prompted if they want to enter another area of the hospital.

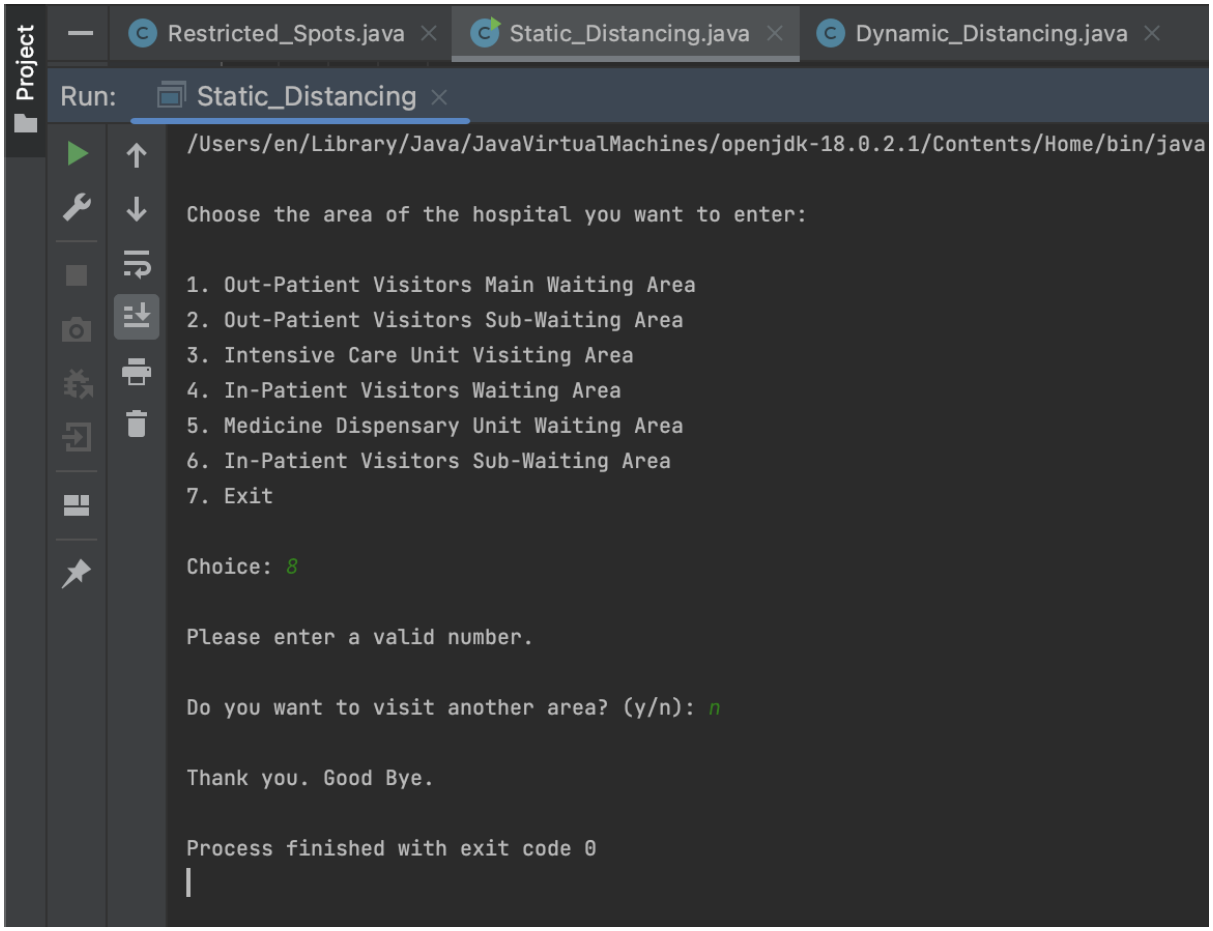
Remark: All these functions work for all 6 locations in the hospital



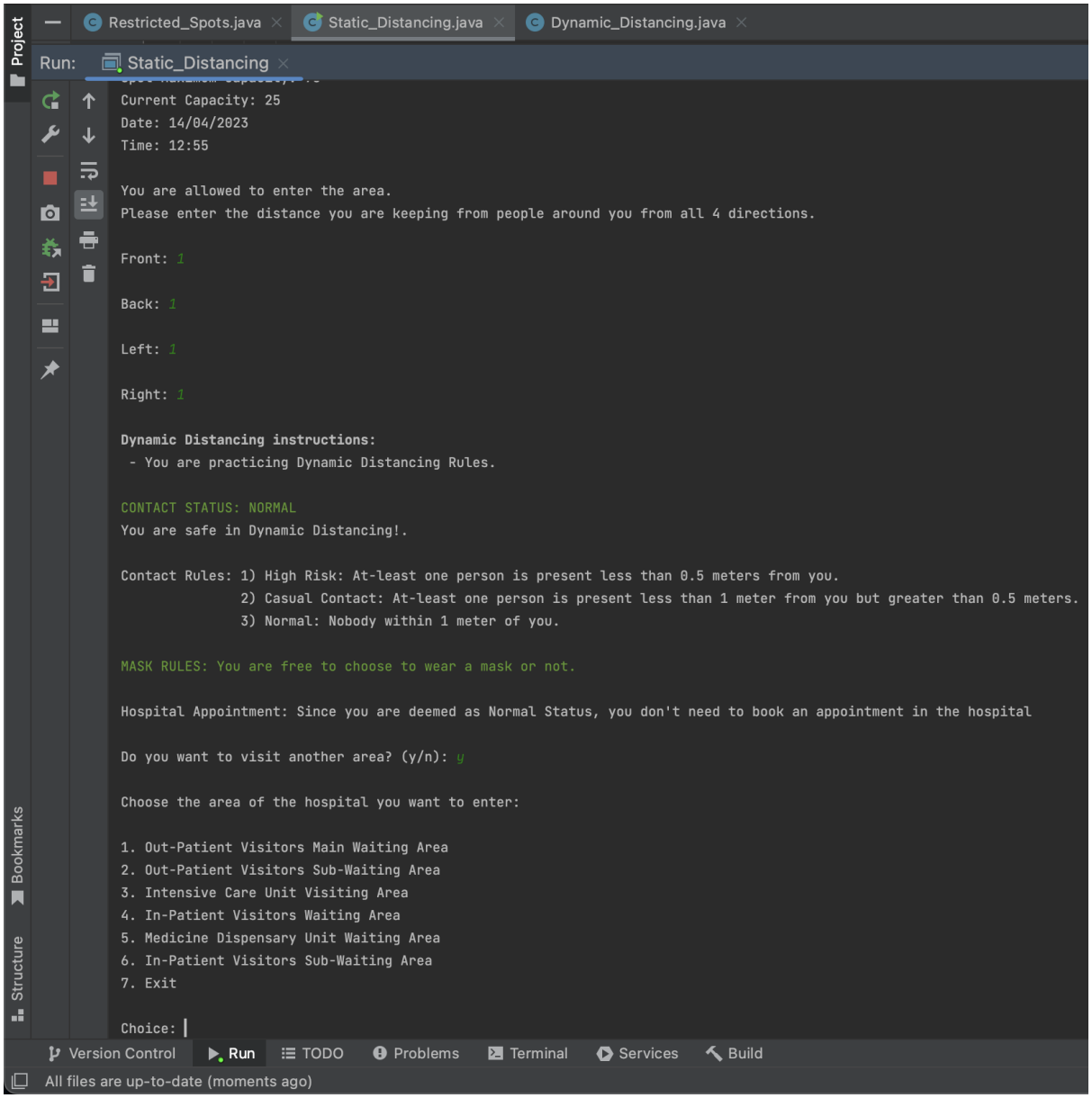
Screenshot 9: If the user enters 7, the program will exit.



Screenshot 10: If the user enters a number that is not from 1-7, then because of the default case in the switch, the program will display ‘Please enter a valid number’. And then prompt the user if they want to visit another area of the hospital.



Screenshot 11: Given at any point the user enters ‘n’ for when they are prompted to visit another area, the program will finish and end and ‘Thank you. Goodbye’ will be printed.



Screenshot 12: Given at any point the user enters ‘y’ or ‘Y’ for when they are prompted to visit another area, the 7 choices will be printed, and the user can choose to enter another area of the hospital.