

Assignment 1: Coroutines in Kotlin

Name:- Harshit Bagga ID:- 1092015

Idea of algorithm

- At first I have made a main function which is calling other functions
- Then I have a function named “worker1” which is used to make the logs of selecting ingredients and coroutine is used in there in order to give a 30 second time selecting the ingredients
- Then I have a function named “worker2” which does the same as “worker1” function but this function is for the second worker in the restaurant as stated in the question
- Then we have the log function which is used to make logs as outputs
- Then I have a function named “sendDataAndAwaitAcknowledge” which will allow two threads to work at the same time so basically it will allow two workers to work at the same time while selecting the ingredients
- Then we have a function called “microwave” which have coroutine for microwave time so that the worker will have to wait for 20 seconds for the microwave to complete it’s task. Since we have only one microwave so worker will have to wait for the first thread to complete and then the second start and then I have used log function to show the output
- Now we have another function called “BlockingDispatcher” in which there are two string variable named “str1” and “str2” then a rand variable which is assigned to random function in order to use random function and also change value if the program is repeated
- Then we have two variables called value1 and value2 which has a random function assigned with a range set between 1 and 2 so I have used random function in order to select type of bread and meat to use so every time program is run again it will take different combination
- Then I have if and else to match if the random function has generated to value1 == 1 then it will choose brown bread else white bread and another if else loop to do the same for the type of meat
- Then there is a runblocking function is used which will let the worker use microwave one at a time
- And then there are two function which is “dressingprocess” and “dressing” function in which dressing function generates the output logs and makes a delay of 10 second for the worker to do the dressing of the sandwich and “dressingprocess” function is used to call coroutines so that if threads wants to work at the same time they can

