|  |  |
| --- | --- |
| Code | Explanation |
|  | This function generates an array of symptoms randomly. It takes a boolean array (symptoms) and its size as input, then assigns true or false values to each element randomly. |
| A screenshot of a computer program  Description automatically generated | This function checks the type of illness based on a set of symptoms. It returns a string indicating whether the patient has COVID-19, Cold, Flu, or another illness. |
| A screenshot of a computer program  Description automatically generated | The start of the main function initializes the Symptoms Checker program, welcoming the user and setting up variables. It introduces an array called symptoms for storing patient information, prompts the user for the number of patients, and initializes illness counters. This section prepares the program to collect and analyze symptom data efficiently. |
| A screen shot of a computer code  Description automatically generated | This loop processes each patient in the Symptoms Checker program. It generates symptoms, determines the illness type, and updates counters accordingly. The loop efficiently classifies patients into categories like COVID-19, Cold, Flu, or Other Illness, contributing to the core functionality of the program. |
| A computer screen shot of a computer code  Description automatically generated | This code snippet outputs the final report for the Symptoms Checker program. It displays the number of patients with symptoms of COVID-19, Cold, Flu, or Other Illness. Additionally, it calculates and outputs the percentage of each illness among the total number of patients. The report is presented in a structured format, concluding the program's execution with a summary of illness occurrences and their respective percentages. |

**Final Report**

