Report

Task # 0

In part a there was the subscript operator used and we determined the information that was giving. In part b the base address was added to the blocks move according to the given condition. Also a diagram was made and the address was made.

Task # 1

A pointer is made to hold the dynamic array. User enters the size of the array and a dynamic memory is allocated on that number. Then a function is call to take the values from the user for each index. After that a show function will show the array. For calculating the average, a function takes the pointer and a size then adds all element of array divided by the size, that calculates the average of the arrays element.

Task # 2

Three pointers were made, two to store the matrices and 1 to store the multiplied array Then data was taken for matrix A. Show function shows the matrix. Then in part B multiplication was done by taking data for matrix B. Then condition was check whether the multiplication is possible or not if possible then was done otherwise error message was displayed.

Task #3

For making the N integer arrays asked from the user how much he wanted arrays. Then a double pointer was used to make the rows of pointer. Then for each row asked from the user how much array is needed. And that much memory was allocated on the index. Then data was taken and

merge and sort function was called that just creates the intermediate array and then adds the first array in the intermediate array then next array is added in such a manner that first element is added to intermediate if duplicate is not found. Then after addition of each sorting is then. At last a final array is made of size equal to the size-duplicate and the intermediate was assign to the final one that is merged and sorted.

Task #4

A Class of CustomerSR was made for the implementation of the q4. The data was made for the 7. The function was made to take the data on data the pay rate was calculates according to the formula given. Then wages were calculated and saved in the person's data. Then was displayed. After that according to the user need data is sorted on the basis of hours and on the basis of complains resolved. Then data was displayed accordingly.

Task # 5

Life of game was basically running on the conditions. First a char array was made and was initialized by alive and dead cells. Alive were represented by * and dead by (''). Then an infinite while loop was made that repeated it infinite time. Then for each element conditions were checked and new were store to the temporary array. After that all checked were assigned to the main array. The program asks from user for to give how much delay in each iteration.

Note:

Some of the functions are used for creating interactivity in the code. Like sleep and system("pause"). This may not work in the Linux.