In The Name Of God

( Quiz 4 - Pointers )

1 - Write a program that gets unlimited number of integers from the user and calculates the average of them and prints them all in sorted manner .The STEP of increment shall be 4.

#You can only use pointers as array and dynamically allocate space in each step .

#You can not use fixed size arrays.

2 - rewrite the function called realloc with the following prototype :

Void \* realloc ( void \* arr , int t\_size ) ;

Look at the following code as example :

#define STEP 12

Void main(void){

//Stage 1

Int \* arr = (int \*) malloc ( sizeof(int) \* 4) ;

.

.

.

//Stage 2 :

arr = (int \* ) realloc (arr , STEP ) ;

.

.

.

}

//Stage 1

arr

|  |  |  |  |
| --- | --- | --- | --- |
| 0 | 1 | 2 | 3 |

//Stage 2

arr

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |