Problem 3:

In the program for storing eight 64-bit integers i have used a pointer of type int64\_t and then made the point to the starting address of the character array (x), thus at the beginning of the program I have used typecasting as well, to convert char\* to int64\_t\* and make it point at the address at which the adressing starts.

I have then used a loop for iterating 8 times and saving a int64\_t integer at the address and then incrementing the address in each oteration(incrementing wouldn’t increase it by 1 but rather by the size of int64\_t i.e. 64 bits or 8 bytes).

Finally I have made the pointer point to the beginning to the character array, as after all the iterations the pointer would be pointing at the end of the array. I have used a for loop to print the eight64 bit integers

In the program for storing sizteen 32-bit integers i have used a pointer of type int and then made the point to the starting address of the character array (x), thus at the beginning of the program I have used typecasting as well, to convert char\* to int\* (as the pointer would be of type char due to initialization as char array )and make it point at the address at which the adressing starts.

I have then used a loop for iterating 16 times and saving a int integer at the address and then incrementing the address in each oteration(incrementing wouldn’t increase it by 1 but rather by the size of int64\_t i.e. 32bits or 4 bytes).

Finally I have made the pointer point to the beginning to the character array, as after all the iterations the pointer would be pointing at the end of the array. I have used a for loop to print the 16 32-bit integers