# Printf Scanf Assignment

**Mandatory:**

Q1. WAP with

1a. function readdisplay() to read the following data types only one at a time at run time and to display.

1. char type
2. integer type
3. char array of maximum 80 characters
4. short type
5. float type

TestData:

‘c’, 8978, “hello”, 8, 45.678

‘H’, 254, “hello Hi How”, 256, 145.2678

A computer screen with text and numbers

Description automatically generated

1b. Create a copy of readdisplay() as function readdisplay2() with changes below

* Instead of reading 1 data at a time, read all inputs using a single scanf().

Test readdisplay2() by changing the read order. Do you observe any issue?

1. The space or enter key is taken in buffer and the character is not read

A computer screen with text on it

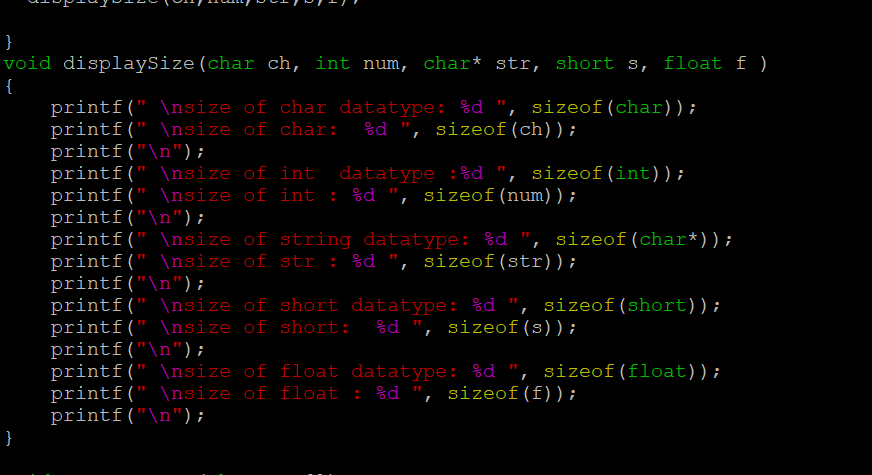
Description automatically generated

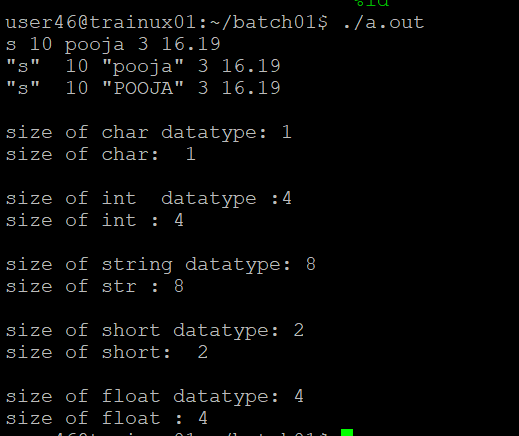
1c. display the char array content in upper case

A screenshot of a computer code

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1d. Add code to display the size of each data type mentioned in Q1a and sizeof the variables of each datatype (You may refer sample code in data\_type\_size.c )





Q2. Try to run the program with code snippet below. Check the output and analyse. Fix it to get correct result.

#include<stdio.h>

int main()

{

unsigned long int ul = 200333333334340;

printf("value is:%d\n", ul);

return 0;

}

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Description automatically generated

Here we can observe that by giving %d as a format specifier we do not get the exact output as it is a long unsigned int. If we change the format specifier to %ld we get the exact output.