# 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

**Ans : A screenshot of a computer program

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().

Ans : The space or enter key is taken in buffer and the character is not read

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

Ans: yes

A computer screen shot of a program

Description automatically generated

1c. display the char array content in upper case

A computer screen with white text

Description automatically generated

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 )

A screen shot of a computer code

Description automatically generated

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;

}

Ans: In the place of %d we should keep %ld.

A screen shot of a computer

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**Optional Assignments:**

Q1. Extend Q1a to use a structure with given datatype. Create , populate and use the structure variable to read, store and display the data.

Q2. Run the program “data\_type\_size.c” and see the output