# Printf Scanf Assignment

**Mandatory:**

Q1. WAP with

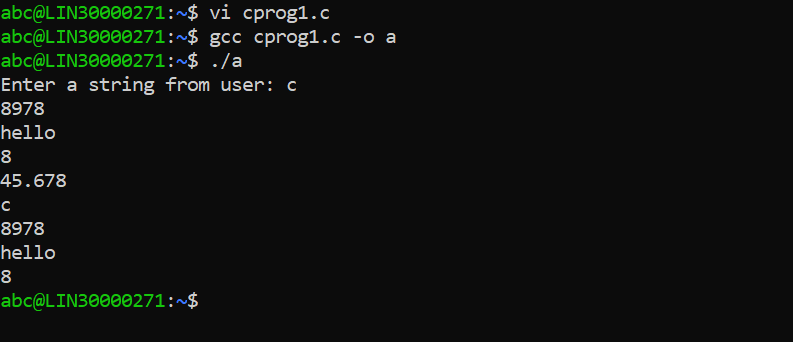
1a. function readdisplay() to read the following data types only one at a time at run time and to display.

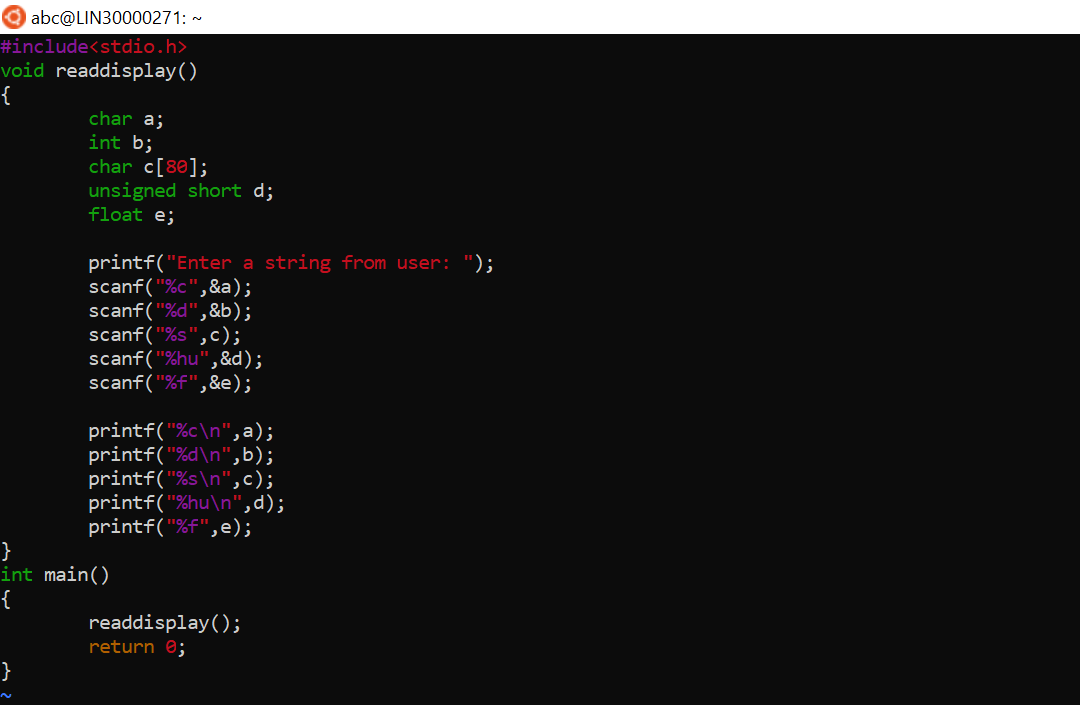
1. char type
2. integer type
3. char array of maximum 80 characters
4. short type
5. float type

TestData:

‘c’, 8978, “hello”, 8, 45.678

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

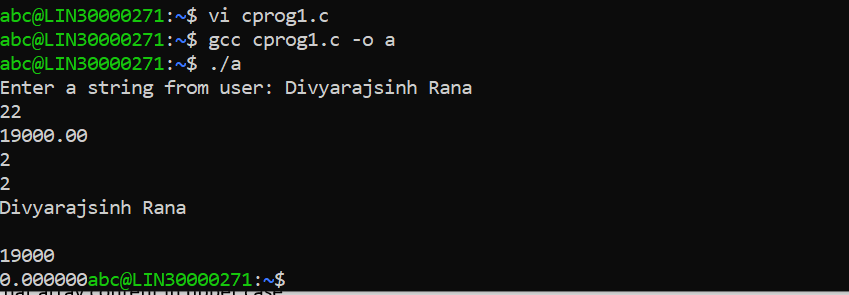




1b. Create a copy of readdisplay() as function readdisplay2() with changes below

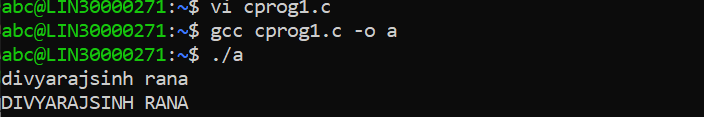
* Instead of reading 1 data at a time, read all inputs using a single scanf().

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



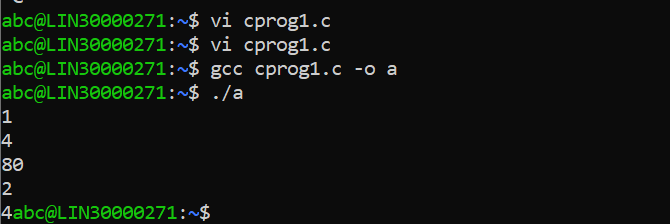


1c. display the char array content in upper case





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()

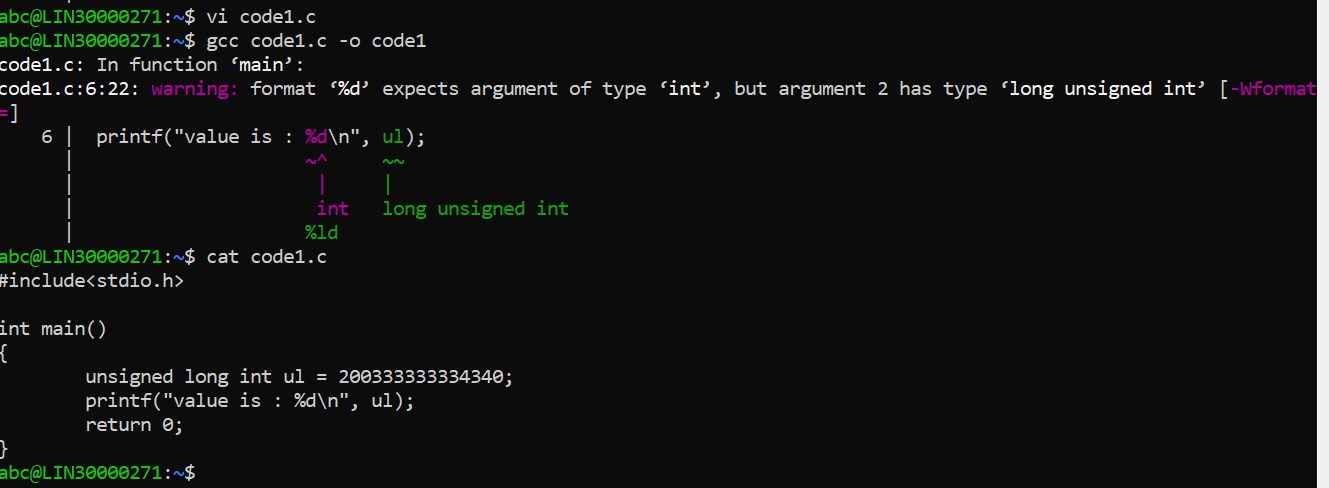
{

unsigned long int ul = 200333333334340;

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

return 0;

}



Ans: this code will throw a error. As shown in above pic the format specifier should be “%ld”.

Hence, correcting the error and replacing it with “%ld”, it should be:

#include<stdio.h>

int main()

{

unsigned long int ul = 200333333334340;

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

return 0;

}

**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