**PRINTF AND SCANF ASSIGNMENT**

**Q1. WAP with**

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

**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**

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**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?**

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1.c. display the char array content in upper case

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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.

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**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**: The issue with the provided code is that the format specifier %d is used to print an unsigned long int. The %d specifier is for int types, which can lead to incorrect output when used with larger data types like unsigned long int.

To fix this, you should use the correct format specifier for unsigned long int, which is %lu.

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