**Datatypes and Format Specifiers Assignment**

**1. WAP to read the following information at run time and to display. Choose appropriate data type and format specifier.**

*1. username [maximum of length 125]*

*2. age*

*3. Salary [float]*

*4. Designation code [as short type with values {1, 2, 3, 4, 5, 6}*

*5. Gender [a single char field]*

#include <stdio.h>

int main()

{

char username[126];

int age;

float salary;

short Designation\_code;

char Gender;

scanf("%s",username);

scanf("%d",&age);

scanf("%f",&salary);

scanf("%hd",&Designation\_code);

scanf(" ");

scanf("%c",&Gender);

printf("Username: %s\nAge: %d\nSalary: %f\nDesignation\_code: %d\nGender: %c",username,age,salary,Designation\_code,Gender);

return 0;

}

**2. WAP to read a user choice as ‘y’ or ‘Y’ or ‘n’ or ‘N’ and display read choice as “Yes” or “No” according to the input received.**

*‘y’ or ‘Y’à display “Yes”*

*‘n’ or ‘N’à display “No”*

*for any other character received à display “invalid character” and exit*

#include <stdio.h>

int main()

{

char choice;

printf("Enter your choice: ");

scanf("%c",&choice);

if(choice == 'Y' || choice == 'y')

printf("Yes");

else if(choice == 'N' || choice == 'n')

printf("No");

else

printf("invalid character");

return 0;

}

**3. WAP to read a number in decimal (0-127) and display it in 2 digit hex characer.**

#include <stdio.h>

int main()

{

int decimal;

printf("Enter a decimal number: ");

scanf("%d",&decimal);

if(decimal<0 || decimal>127)

{

printf("Inalid input.Please enter a number between 0 to 127.");

return 1;

}

else

printf("%02X\n",decimal);

}