

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]

```
user64@trainux01: ~/Batch17Oct2024_189/Assignment/program
#include<stdio.h>
void getDetails();
int main()
{
    getDetails();
    return 0;
}
void getDetails()
{
    char username[125];
    int age;
    float salary;
    short code;
    char gender;

    printf("\n Enter username:");
    scanf("%s", username);
    printf("\n Enter age:");
    scanf("%d", &age);

    printf("\n Enter salary:");
    scanf("%f", &salary);

    printf("\n Enter designation code:");
    scanf("%hd", &code);
    printf("\n Enter gender:");
    scanf(" ");
    scanf("%c", &gender);
    printf("\n\n");
    printf("\nUsername:%s", username);
    printf("\nAge:%d", age);
    printf("\nSalary:%.2f", salary);
    printf("\nDes Code:%d", code);
    printf("\nGender:%c", gender);
    printf("\n\n");
}
```

```

user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ vi data.c
user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ gcc data.c
user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ ./a.out

Enter username:Ashwini

Enter age:22

Enter salary:550000

Enter designation code:2

Enter gender:Female


Username:Ashwini
Age:22
Salary:550000.00
Des Code:2
Gender:F

```

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' → display "Yes"

'n' or 'N' → display "No"

for any other character received → display "invalid character" and exit

```

#include<stdio.h>
#include<stdlib.h>
void getDetails();
int main()
{
    char ch;
    printf("Enter y/n:");
    scanf("%c", &ch);
    if(ch=='y' || ch=='Y')
        printf("Yes");
    else if(ch=='n' || ch=='N')
        printf("No");
    else
        printf("Invalid character");
    printf("\n\n");
    return 0;
}
~
~
~

```

```

Yesuser64@trainux01:~/Batch17Oct2024_189/Assignment/program$ vi dataa.c
user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ gcc dataa.c
user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ ./a.out
Enter y/n:y
Yes

user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ ./a.out
Enter y/n:n
No

```

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

```

#include<stdio.h>
void getDetails();

int main()
{
    int n;
    printf("Enter Decimal");
    scanf("%d", &n);
    printf("\nHexadecimal value is:%X\n", n);
    printf("\n\n");
    return 0;
}
~
~

```

```

user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ vi dataaa.c
user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ gcc dataaa.c
user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ ./a.out
Enter Decimal12

Hexadecimal value is:C

user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ ./a.out
Enter Decimal56

Hexadecimal value is:38

user64@trainux01:~/Batch17Oct2024_189/Assignment/program$ ./a.out
Enter Decimal10

Hexadecimal value is:A

```