Practical Number	02
Areas covered	Data Input & output

Write a C program for each of the following question

Question 1
Have the computer print

HI, HOW OLD ARE YOU?

on one line. The user then enters his or her age immediately after the question mark. The computer then skips two lines and prints on two consecutive lines.

WELCOME (age)
LET'S BE FRIENDS!

Write a complete C program to do the above.

```
    int age;

  printf("HI,HOW OLD ARE YOU?");
  scanf("%d",&age);

  printf("\n\nWELCOME %d\nLET'S BE FRIENDS!",age);
```

Question 2
Write a program which uses the **format commands** with modifiers to print the following output:

2	4	8
3	9	27
4	16	64
5	25	125

Remark:

Observe how format commands are used in the following program.

```c
#include <stdio.h>

int main()
{
    printf("%5d%5d\n", 1, 2);  //Right Align
    printf("%5d%5d\n", 10, 20);      //Right Align

    printf("\n\n\n");

    printf("%-5d%-5d\n", 1, 2);       //Left Align
    printf("%-5d%-5d\n", 10, 20);   //Left Align

    return 0;

}
```

printf("%6d%6d%6d\n",2,4,8);
printf("%6d%6d%6d\n",3,9,27);
printf("%6d%6d%6d\n",4,16,64);

Question 3
Write a simple program to evaluate the average speed of a car traveled in meters per second (ms^{-1}).
Given that

$$\text{Average Speed} = \frac{\text{Distance travelled}}{\text{Time taken}}$$

Try using integer variables. What would be the problem? Why? How to fix the problem?

int distance,time,avg;

printf("Enter the distance travelled (in meters) : ");
scanf("%d",&distance);
printf("Enter the time taken (in seconds): ");
scanf("%d",&time);

avg=(distance/time);

printf("Average is %d",avg);

//Since we are decalring avg as a integer , answer displays only the whole number. Theirfore we have to use %f instead of %d .

Question 4

Convert a temperature reading in degrees Fahrenheit to degrees Celsius, using the formula

$$C = (5 / 9) \times (F - 32)$$

Test the program with the following values: 68, 150, 212, 0, -22, -200 (degree Fahrenheit).

```c
    float temf,temc;

printf("Enter the temperature in Fahrenheit : ");
scanf("%f",&temf);

temc=(5.0/9.0)*(temf-32);

printf("Temperature is %f celcius.",temc);
```