

Practical Number	02
Areas covered	Data Input & output , Operators

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.

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.

```
#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;
}
```

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?

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).

Question 5

What will be output of the following program?

```
#include<stdio.h>
int main(){
    int i=5,j;
    j=++i+++i+++i;
    printf("%d %d",i,j);
    return 0;
}
```

Question 6

What will be output of the following program?

```
#include<stdio.h>
int main(){
    int i=1;
    i=2+2*i++;
    printf("%d",i);
    return 0;
}
```

Question 7

What will be output of the following program?

```
#include<stdio.h>
int main(){
    int a=2,b=7,c=10;
    c=a==b;
    printf("%d",c);
}
```

```
    return 0;
}
```

Question 8

What will be output of the following program?

```
#include<stdio.h>
int main(){
    int a=0,b=10;
    if(a=0){
        printf("true");
    }
    else{
        printf("false");
    }
    return 0;
}
```

Question 9

What will be output of the following program?

```
#include<stdio.h>
int main(){
    int a;
    a=015 + 0x71 +5;
    printf("%d",a);
    return 0;
}
```

Question 10

What will be output of the following program?

```
#include<stdio.h>
int main(){
    int i=5;
    int a=++i + ++i;
    printf("%d",a);
    return 0;
}
```