Submission of Practical 01 & 02

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➢ Practical Number 01

1.Display name and school in two separate lines

```
#include <stdio.h>
int main()
{
    printf("Eshini Anupabha\n");
    printf("Taxila Central College-Horana\n");
}
```

2.Display following output using printf statement

```
#include <stdio.h>
int main()
{
    printf("*\n");
    printf("**\n");
    printf("***\n");
    printf("****\n");
    printf("*****\n");
}
```

The expected output

```
*
**
***
****
*****
```

3.Input values for int, float, double and char and display value of each variable

```
#include <stdio.h>
int main()
{
    int year;
    float height;
    double dec;
    char name[15];
    printf("Enter your birth year : ");
    scanf("%d",&year);
    printf("Enter your height in meters : ");
    scanf("%f",&height);
    printf("Enter a decimal number : ");
    scanf("%lf",&dec);
    printf("Enter your name : ");
    scanf("%s",&name);
    printf("\nBirth year is %d\n",year);
    printf("Height is %.2f m\n",height);
    printf("Decimal number is %lf\n",dec);
    printf("Name is %s\n\n",name);
}
```

4.Input 02 integers and display total

```
#include <stdio.h>
int main()
{
    int num1,num2,tot;
    printf("Enter first integer : ");
    scanf("%d",&num1);
    printf("Enter second integer : ");
    scanf("%d",&num2);
    tot=num1+num2;
    printf("\nTotal is %d\n",tot);
}
```

5.Input 02 numbers with decimals and display the average with decimals

```
#include <stdio.h>
int main()
{
    float n1,n2,avg;
    printf("Enter first number : ");
    scanf("%f",&n1);
    printf("Enter second number : ");
    scanf("%f",&n2);
    avg=(n1+n2)/2;
    printf("\nAverage is %.2f\n",avg);
}
```

6.Input student name, birth year, and display student name with age

```
#include <stdio.h>
 int main()
 {
    char name[20];
    int byear,age;
    printf("Enter student name : ");
    scanf("%s",&name);
    printf("Enter student birth year : ");
    scanf("%d",&byear);
    age=2023-byear;
    printf("%s is %d years old",name,age);
}
```

7.Input two numbers, swap the values and display the output. (Before swap and after swap)

```
#include <stdio.h>
int main()
{
    int num1,num2,temp;
    printf("Before swap - \nEnter first number : ");
    scanf("%d",&num1);
    printf("Enter second number : ");
    scanf("%d",&num2);
    temp=num1;
    num1=num2;
    num2=temp;
    printf("\nAfter swap - \nFirst number is %d ",num1);
    printf("\nSecond number is %d \n",num2);
}
```

8.Execute the following code and analyze the output. Study the output format

```
#include <stdio.h>
int main()
{
     printf("The color:%s\n","blue");
     printf("First number: %d\n", 12345);
     printf("Second number: %04d\n", 25);
     printf("Third number: %i\n", 1234);
     printf("Float number: %3.2f\n", 3.14159);
     printf("Hexadecimal: %x\n", 255);
     printf("Octal: %o\n", 255);
     printf("Unsigned value: %u\n", 150);
     printf("Just print the percentage sign %%\n", 10);

}
```

The output :

```
The color:blue
First number: 12345
Second number: 0025
Third number: 1234
Float number: 3.14
Hexadecimal: ff
Octal: 377
Unsigned value: 150
Just print the percentage sign %
```

➢ Practical Number 02

Question 1

```
#include <stdio.h>
int main()
{
    int age;
    printf("HI, HOW OLD ARE YOU?");
    scanf("%d",&age);
    printf("\n\nWELCOME %d",age);
    printf("\nLET'S BE FRIENDS!");
}
```

Question 2

```
#include <stdio.h>
int main()
{
    printf("%20d%9d%9d\n\n", 2, 4, 8);
    printf("%20d%9d%9d\n\n", 3, 9, 27);
    printf("%20d%9d%9d\n", 4, 16, 64);
}
```

Question 03

```
#include <stdio.h>
int main()
{
    float avg,dist,time;
    printf("Enter the distance traveled in Meters : ");
    scanf("%f",&dist);
    printf("Enter the time taken in seconds : ");
    scanf("%f",&time);
    avg=(dist/time);
    printf("The average speed is %.2f m/s",avg);
}
```

Question 04

```
#include <stdio.h>
int main()
{
    float fah,cel;
    printf("Enter the temperature in Fahrenheit : ");
    scanf("%f",&fah);
    cel=(5.0/9.0)*(fah-32);
    printf("Temperature in Celsius : %.2f",cel);
}
```