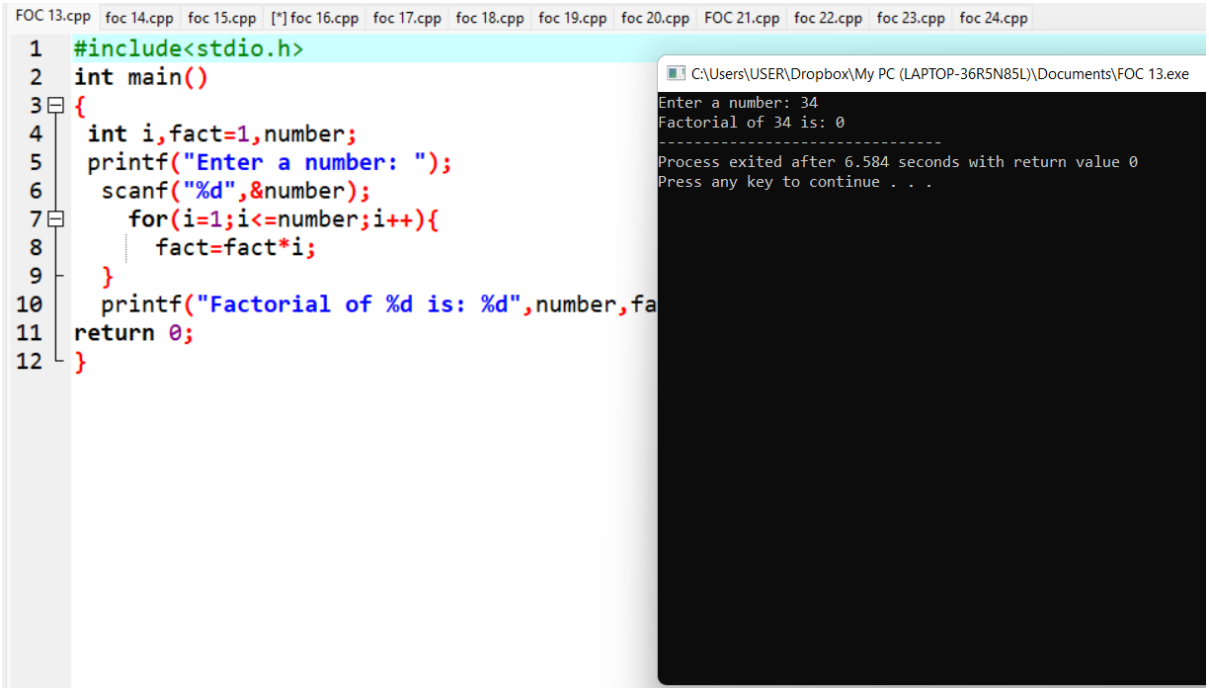
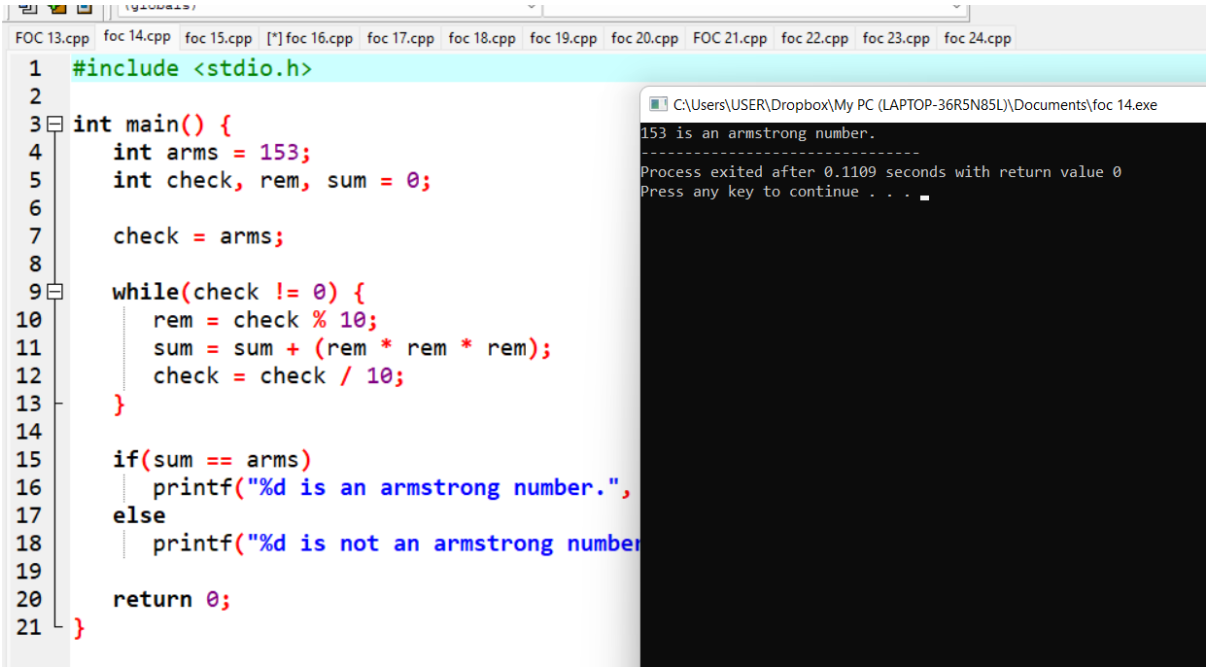
DAY-2

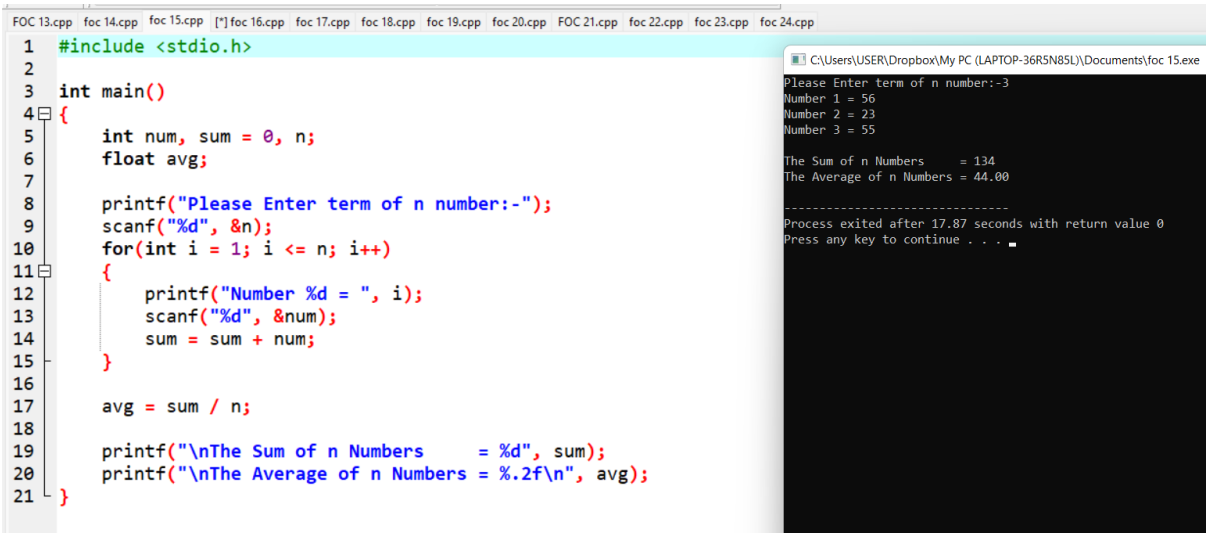
1) 13. Product series (Factorial of a given number)



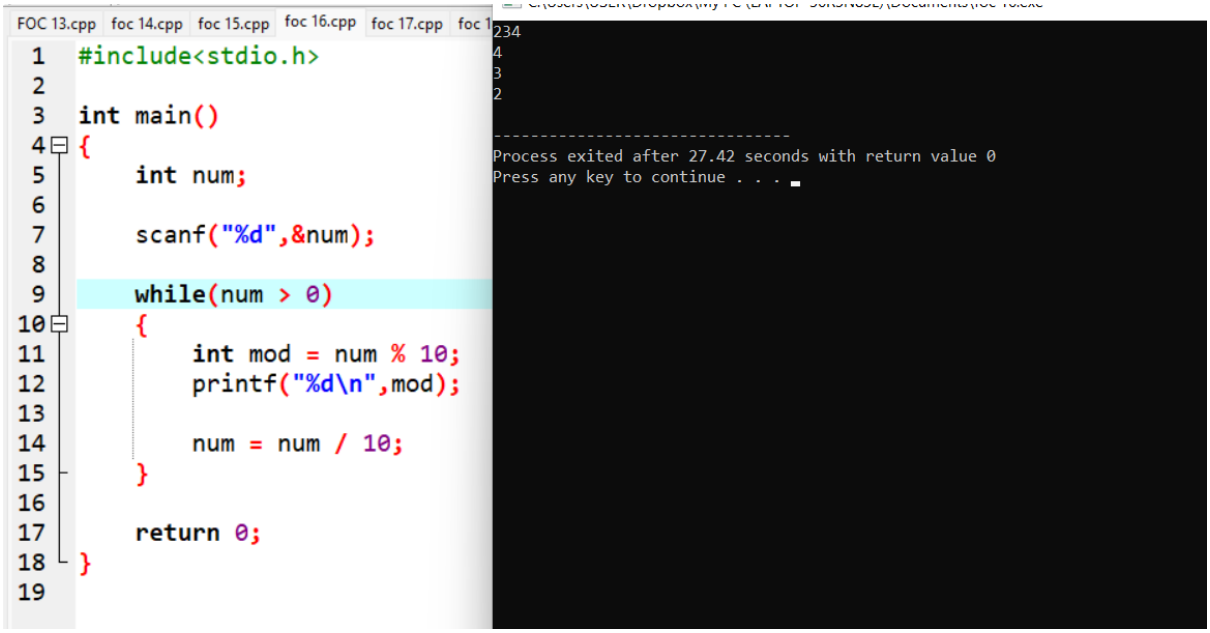
14.Finding given number is Armstrong or not



15.Summing up any n numbers and finding average



16.Printing digits of an integer number



17.Summing up the digits of an integer number

```c
#include <stdio.h>
int main()
{
    int n, t, sum = 0, remainder;

    printf("Enter an integer\n");
    scanf("%d", &n);

    t = n;

    while (t != 0)
    {
        remainder = t % 10;
        sum       = sum + remainder;
        t         = t / 10;
    }

    printf("Sum of digits of %d = %d\n", n, sum);

    return 0;
}
```

```
C:\Users\USER\Dropbox\My PC (LAPTOP-36R5N85L)\Documents\foc 17.exe
Enter an integer
2397
Sum of digits of 2397 = 21

--------------------------------
Process exited after 15.04 seconds with return value 0
Press any key to continue . . .
```

18.Revering the digits of an integer number

```c
#include <stdio.h>
int main()
{
    int number, reversed = 0;
    printf("Enter any number = ");
    scanf("%d", &number);
    while(number != 0)
    {
        reversed = (reversed * 10) + (number % 10);
        number /= 10;
    }
    printf("Reverse = %d", reversed);
    return 0;
}
```

```
C:\Users\USER\Dropbox\My PC (LAPTOP-36R5N85L)\Documents\foc 18.exe
Enter any number = 2094658
Reverse = 8564902
--------------------------------
Process exited after 4.268 seconds with return value 0
Press any key to continue . . .
```

19.Finding the given integer is positive or negative

```c
#include <stdio.h>
int main()
{
    int num;

    printf("Input a number :");
    scanf("%d", &num);
    if (num >= 0)
        printf("%d is a positive number \n", num);
    else
        printf("%d is a negative number \n", num);
}

```

```
C:\Users\USER\Dropbox\My PC (LAPTOP-36R5N85L)\Documents\foc 19.exe
Input a number :-2478458
-2478458 is a negative number

--------------------------------
Process exited after 12.18 seconds with return value 0
Press any key to continue . . .
```

20.Swapping two numbers with a temporary variable

```c
#include<stdio.h>
 int main()
{
int a=10, b=20;
printf("Before swap a=%d b=%d",a,b);
a=a+b;//a=30 (10+20)
b=a-b;//b=10 (30-20)
a=a-b;//a=20 (30-10)
printf("\nAfter swap a=%d b=%d",a,b);
return 0;
}
```

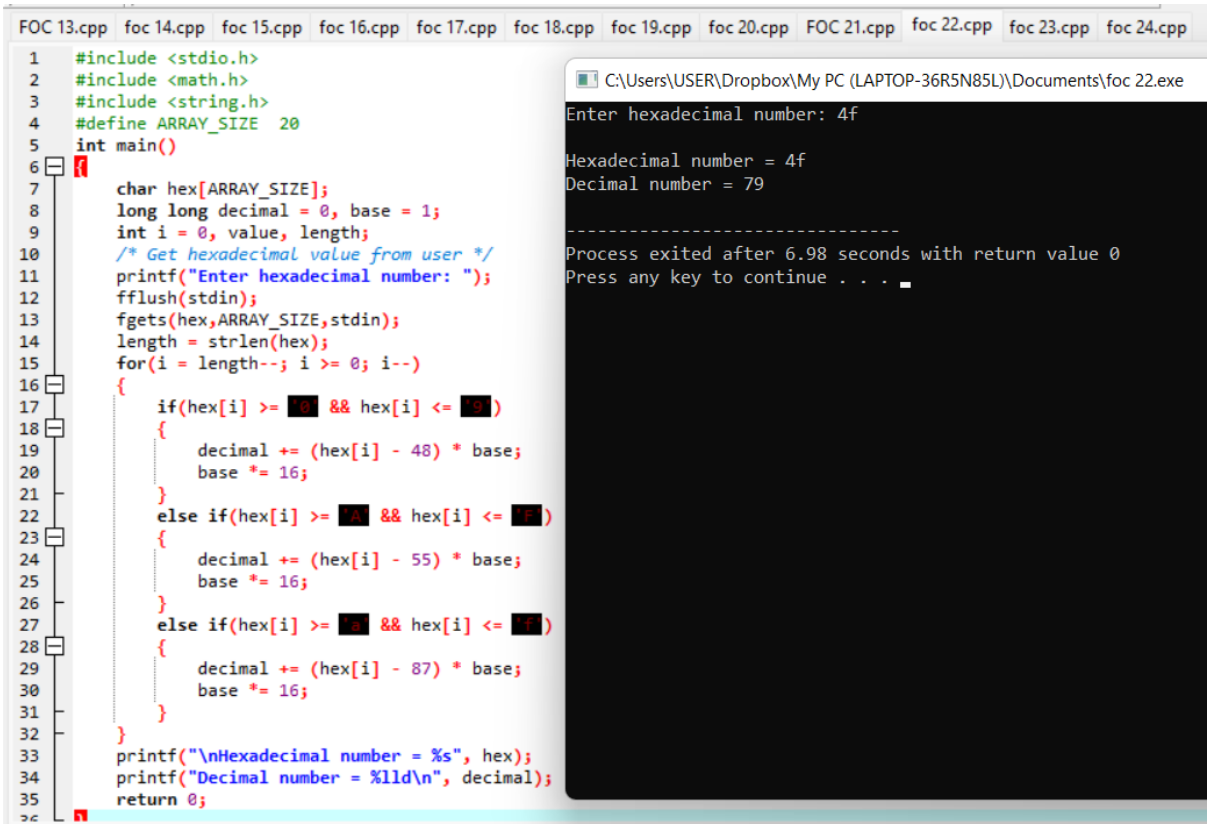
```
C:\Users\USER\Dropbox\My PC (LAPTOP-36R5N85L)\Documents\foc 20.exe
Before swap a=10 b=20
After swap a=20 b=10
--------------------------------
Process exited after 0.07355 seconds with return value 0
Press any key to continue . . .
```

21.Program to convert decimal to hexadecimal

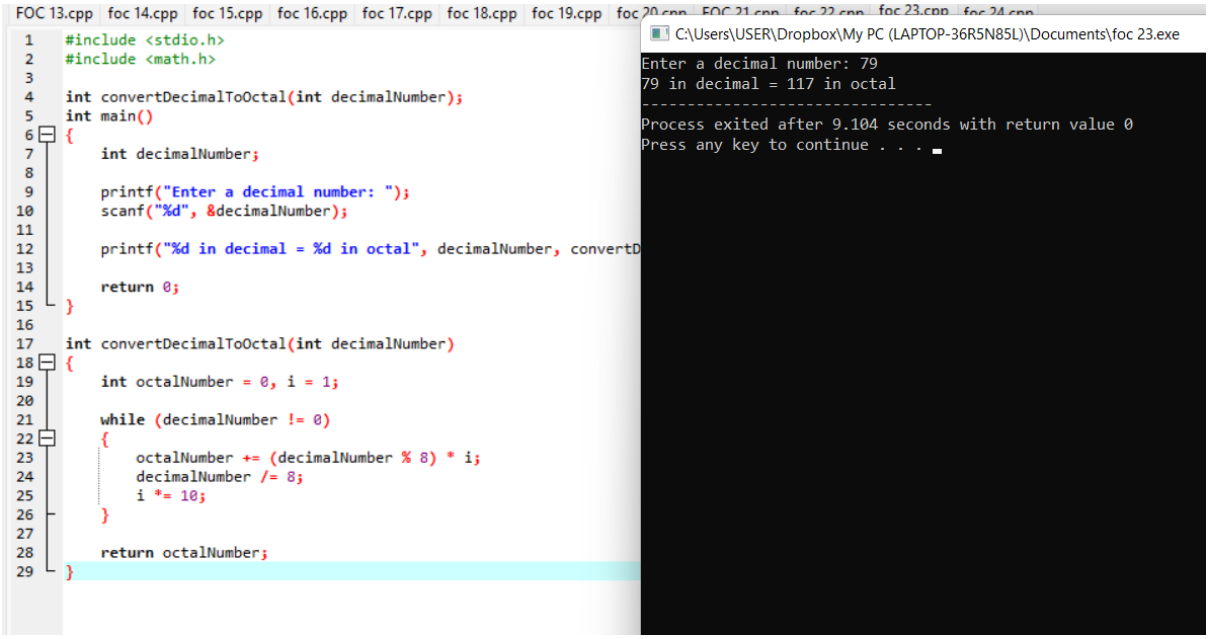
```c
#include <stdio.h>

int main()
    {
    long int decn,rmd,q,dn=0,m,l;
    int i=1,j,tmp;
        char s;

       printf("\n\nConvert Decimal to Hexadecimal:\n ");
       printf("-------------------------\n");

    printf("Input  any Decimal number: ");
    public int __cdecl printf (const char * __restrict__ _Format,
    q = decn;
        for(l=q;l>0;l=l/16)
            {
        tmp = l % 16;
        if( tmp < 10)
                    tmp =tmp + 48; else
                tmp = tmp + 55;
                        dn=dn*100+tmp;
            }
          printf("\nThe equivalent Hexadecimal Number : ");
         for(m=dn;m>0;m=m/100)
            {
               s=m % 100;
               printf("%c",s);
            }
    printf("\n\n");
}
```

```
Select C:\Users\USER\Dropbox\My PC (LAPTOP-36R5N85L)\Documents\FOC 21.exe


Convert Decimal to Hexadecimal:
 -------------------------
Input  any Decimal number: 79

The equivalent Hexadecimal Number : 4F


--------------------------------
Process exited after 8.938 seconds with return value 0
Press any key to continue . . .
```

22.Program to convet Hexa to decimal



23.Program to convert decimal to octal



24.Program to convert octal to decimal

FOC 13.cpp | foc 14.cpp | foc 15.cpp | foc 16.cpp | foc 17.cpp | foc 18.cpp | foc 19.cpp | foc 20.cpp | FOC 21.cpp | foc 22.cpp | foc 23.cpp | foc 24.cpp

```c
#include <stdio.h>
#include <math.h>

int main()
{
    int num, dec = 0, rem = 0, place = 0;

    printf("Enter an Octal Number\n");
    scanf("%d", &num);

    printf("\nDecimal Equivalent of %d is ", num);
    while(num)
    {
        rem = num % 10;
        dec = dec + rem * pow(8, place);
        num = num / 10;
        place++;
    }
    printf("%d\n", dec);
    public int __cdecl printf (const char * __restri
    return 0;
}
```

```
C:\Users\USER\Dropbox\My PC (LAPTOP-36R5N85L)\Documents\foc 24.exe
Enter an Octal Number
117

Decimal Equivalent of 117 is 79

--------------------------------
Process exited after 10.93 seconds with return value 0
Press any key to continue . . .
```