23.8.2018

multiple exit condition

for(initial condition; exit condition ; incre.)

{

i=1, j=2, k=3

}

i=1

for(i=1; i<=n ; i++).

not neces

i++, --j, k=k+5

{

printf("%d", i);

i++;

if(i>n)

{ break;

}

for(;;). while(1)

{ {

≡

} }

Fib = 1, 1, 2, 3, 5, 8, 13

$$a_i = a_{i-1} + a_{i-2}$$

printf (n fibonacci series no).

B=0, A=1

A=0, B=1

i=0

$a_i = a_{i-1} + a_{i-2}$ → printf("1");

⇓

```
for( ; i<count; i++)
{ C = B + A        → printf("%d", C);
  A = B
  B = C
};
```

	i	0	1		
	C	1*	2* 1*	2*	3*
1 0	A	0	1	2 1	
0 1	B	1	2 1	3 2	

```
for(i=1; i<5; ++i);      (2, 5)
   printf("%d", i);
for(i=1; i<5; i++);      (1, 4)
   printf("%d", i);
```

↓ (5)

printf same ←

```
for(i=0; i<5; i++);        /* ++i written above i++ */
{ printf("%d", i);

   if (~~cont~~; i==4).
     break;

→
}
```

→ ?? whether the loop has terminated normally or abnormally

```
- if (i==5).
    printf("Normal exit);
  else
    printf("abnormal exit");
```

i	0*

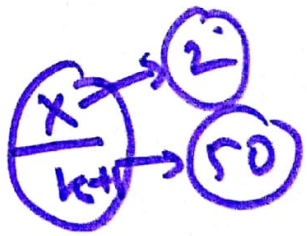
$$e^x = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} \cdots \text{n terms}$$

$$\left(1 + \frac{1}{2} + \frac{1}{2} + \frac{1}{3} + \frac{1}{4}\right) \text{---}$$

$$e^x - \hat{e}^x < 10^{-4}$$

$$\frac{x^k}{k!} < 0.001$$

$$\frac{x^{k+1}}{(k+1)!}$$



If (Sum (k+100) - Sum (k) < 10^{-4})

Sum 1 Sum 2.

Find whether a number is prime or n

```
for( Y=2; Y<sqrt(X); Y++ )
  {

    if (X%Y==0)
      {printf("%d is not prime", X);
      }break;

  }
If(Y==X)
  printf ("%d is prime" X);
```

$24 = 2^3 * 3$

$X = X_1 * X_2$

maximum value of smaller number.

$\sqrt{X}$

temp = 1·0; sum = 0.0;

```
for(i=1; i<= 100; i++)
{ sum = sum + term.
  term = term * x/i        = e^x = 1+ ... x^100/100! · x/(i+1)
}
```

→ /* sum upto the first 100 terms */

```
sum0 = 0; term0 = 1.0.
for (i = 1; sum - sum0 > 0·0001, i++.
{
    sum0 = sum + term0.
    term0 = term0 * x/i
    ----------------------
    sum = sum + term.
    term = term * x/(i+100) .
}
```