

```
| a=input('---')3
```

```
| disp(a)
```

```
| if ---  
|  
end
```

```
| if ---  
|  
| else ---  
|  
end
```

```
| for ---  
|  
end
```

```
| while ---  
|  
end
```

Continue

break

return

$$s = \sum_{i=1}^n (i+1)^2$$

```
N=input('N?');
```

```
S=0;
```

```
[ for i=1:N  
    a=(i+1)^2;  
    S=S+a;  
end
```

```
disp(S)
```

$$\frac{n}{\prod_{i=2}^n \frac{1}{i+1}}$$

```
n=input('n? ');
p=1;
for i=2:n
    p=p*1/(i+1);
end
disp(p)
```

$$n! = \prod_{i=1}^n i$$

```
n=input('n? ');
p=1
```

— — — — —

$$n! = (n)(n-1)(n-2) \dots 1$$

```
for i=1:n
```

```
    p=p*i;
```

```
n=input('n? ');
```

```
end
disp(p)
```

```
p=1;
```

```
for i=n:-1:1
```

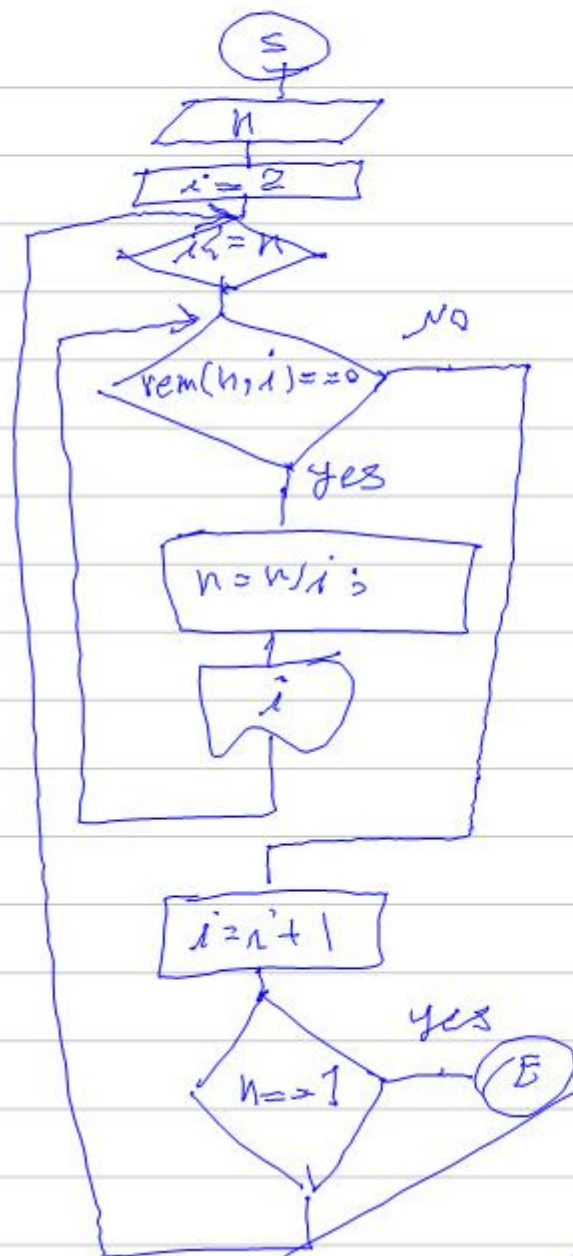
```
    p=p*i;
```

```
end
```

```
disp(p)
```

— — — — —

تجزیه به عوامل اول



$n = \text{input}('n?')$;

```

for i = 2 : n
    while rem(n, i) == 0
        n = n/i;
        disp(i);
    end
    if n == 1
        end return
    end
end

```

دنباله فیبوناچی

1, 1, 2, 3, 5, 8, ...

برای هر n در دنباله فیبوناچی

$n = \text{input}('n?')$;

$a = 1;$

$b = 1;$

$\text{disp}(a)$

$\text{disp}(b)$

for $i = 3 : n$

$c = a + b;$

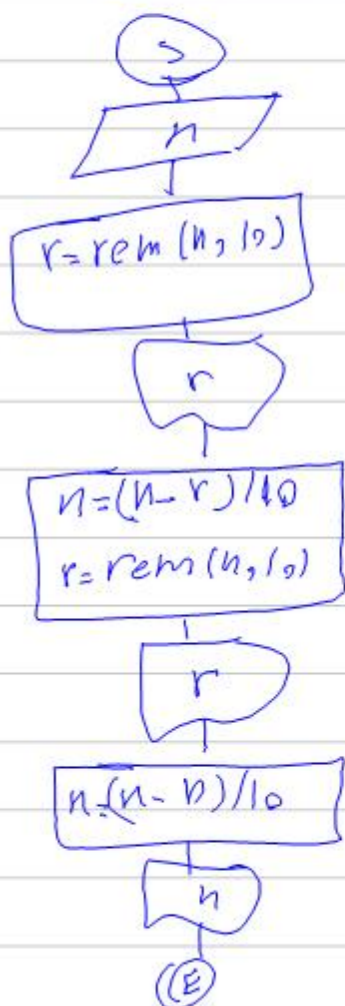
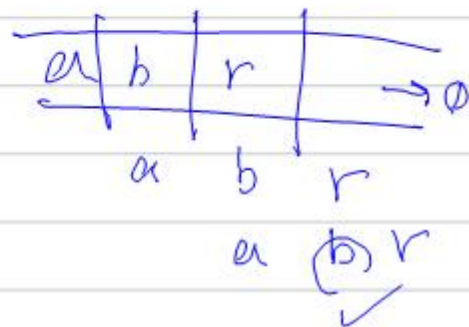
$a = b;$

$b = c;$

$\text{disp}(c)$

end

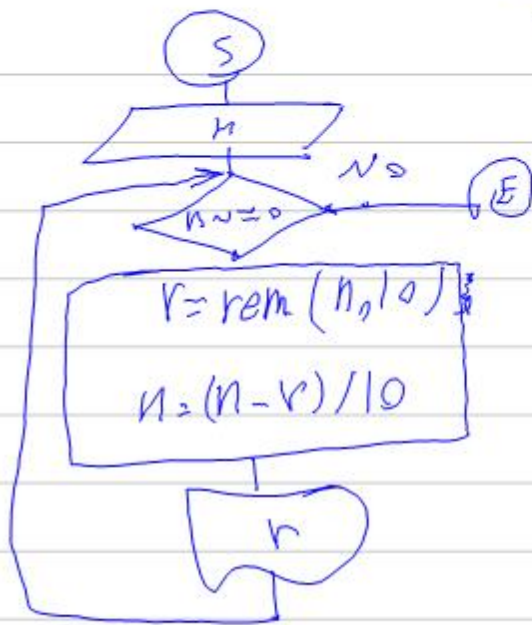
disp(b)



1. بعد از ارضاء و ابراق کاف در دهان و لبها

$$\text{disp}(n)$$

• یک عدد را از رقم یک تا ۹



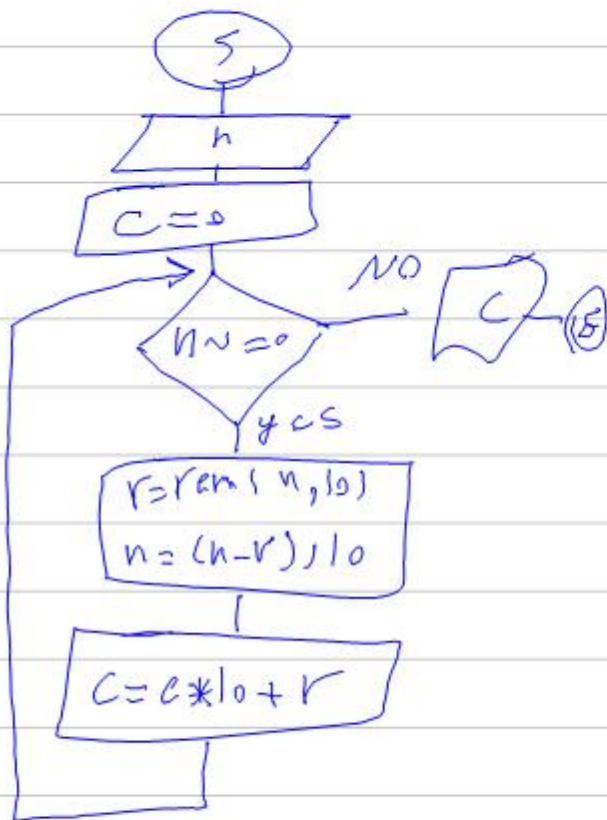
$n = \text{input}('n?');$

while $n \neq 0$

$r = \text{rem}(n, 10);$

$n = (n - r) / 10;$

end $\rightarrow \text{disp}(r)$



$n = \text{input}(\text{---})$

$C = 0;$

while $n \neq 0$

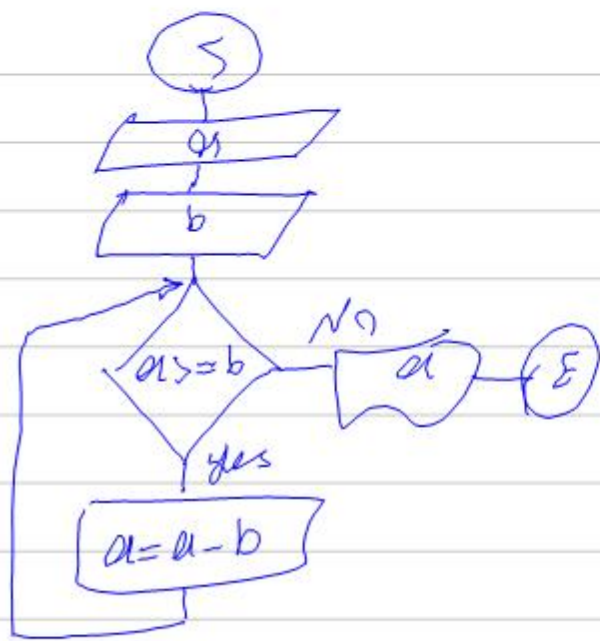
$r = \text{rem}(n, 10);$

$n = (n - r) / 10;$

$C = C * 10 + r;$

end

$\text{disp}(C)$

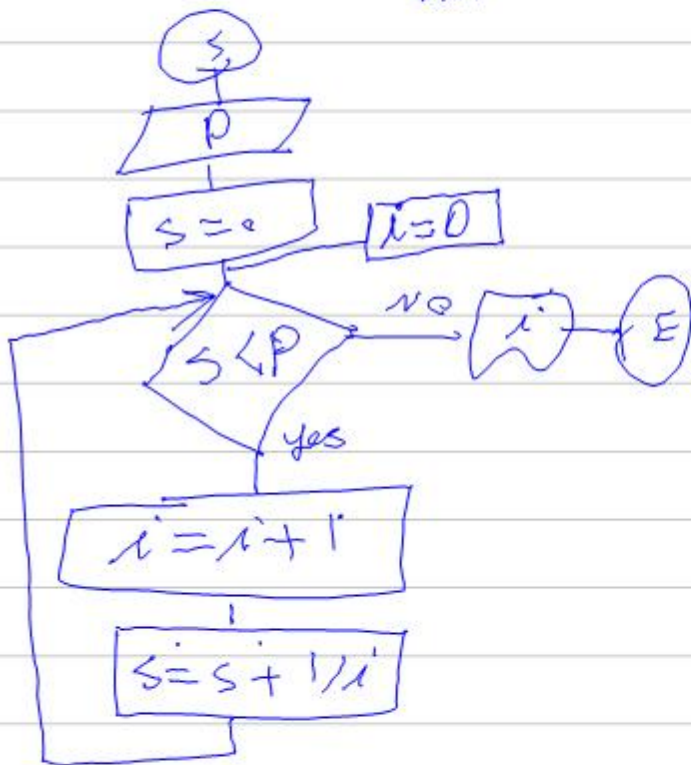


نوعی الگوریتم برای پیدا کردن بزرگترین مقسوم‌الیه مشترک

```

a = input('a?');
b = input('b?');
while a >= b
    a = a - b;
end
disp(a)
  
```

$$\sum_{i=1}^n \frac{1}{i} \geq p$$



p = input('p?');

S = 0;

i = 0;

while S < p

i = i + 1;

S = S + 1/i;

end

disp(i)