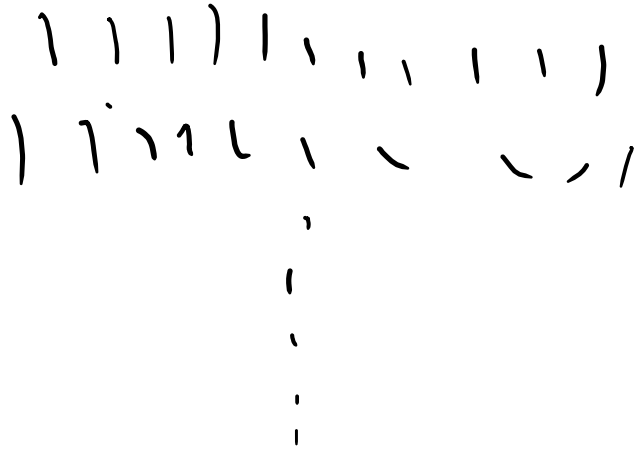
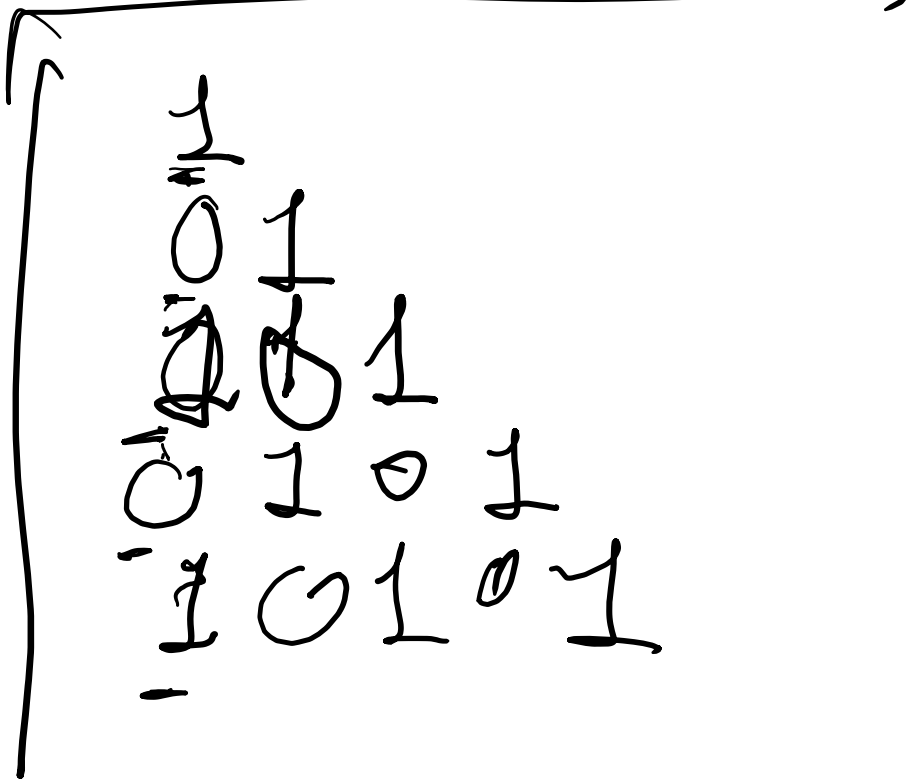
Let’s solve it

Fill the whole screen by 1

```
while(1)
{
printf("1");
}
```



what if following pattern?



i

2 x 1 = 2

2 x 2 = 4

2 x 3 = 6

2 x 4 = 8

⋮

2 x 10 = 20

1 to 10

```
int i=1;
while(i<=10)
{
printf("2 x %d = %d \n", i, 2*i);
i=i+1; //i++;
}
```

```
int n;
int i=1;
scanf("%d",&n);
for(i=1;i<=10;i++)
{
printf("%d x %d = %d\n",
                n, i, n*i);
}
```

for displaying table of user's choice

Sum of squares

Ex 1 $n \leftarrow 5$

$1^2 + 2^2 + 3^2 + 4^2 + 5^2$

Ex 2 $1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \frac{1}{5}$

Sum of squares.

result	i	
0	1	0 + (1*1)
1	2	1 + (2*2)
5	3	5 + (3*3)
14	4	14 + (4*4)
30	5	30 + (5*5)
55	6	?

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

 int i,n;
 long int result=1;//Avoid addition of
zeroes itself by assigning 1. Note that for
loop then starts from 2.

 //scanf("%d",&n);
 n=5;
 for(i=2;i<=n;i++)
 {
     printf("%d\n",i*i);
     result = result + (i*i);

 }
 printf("Result of series is %ld",result);

 return 0;
}
```

```
#include<stdio.h>
#include <conio.h>
int main()
{

 int i,n;
 long float result=1.0;

 //scanf("%d",&n);
 n=5;
 for(i=2;i<=n;i++)
 {
     printf("%5.2f\n",(float)1/i);
     result = result + ((float)1/i);
 }
 printf("Result of series is %f",result);
 return 0;
}
```

(series)
sequences & patterns
teach you how to use
looping in a language.
Hence, practice more and more
series, patterns.

Observe the values which
are changing their behaviour/data.