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Thread: [print numbers with loop side by side](#)

telmo_d - March 30, 2015, 5:32 am

I have too create an output similar to this for input 5.

```
15
24
33
42
51
```

I have the code below but its just printing me this:

```
5
1
2
3
4
5
```

I don't understand why. Why is that?

```
Code #include <stdio.h>
#include <stdlib.h>
```

```
int main()
```

```
{
```

```
    int x, y, z;
    printf("Introduce a number: \n");
    scanf("%d", &z);
    for (x=1;x<=z;x++)
    {
        printf("%d\n", x);
        for (int y=z;y<=0;y--)
        {
            printf("  %d\n", y);

        }
    }
}
```

TheComet - March 30, 2015, 5:48 am

A much easier solution:

PHP Code

```
<?php
```

```
#include <stdio.h>

int main()
{
    int x, y;

    printf("Introduce a number: \n");
    scanf(" %d", &x);

    y = 1;
    while(x)
    {
        printf("%d%d\n", y++, x--);
    }

    return 0;
}
```

telmo_d - March 30, 2015, 6:00 am

(Mar 30, 2015 05:48 AM)TheComet Wrote: [\[CITE\]](#) A much easier solution:

PHP Code

```
<?php
```

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

```
int main()
{
    int x, y;

    printf("Introduce a number: \n");
    scanf(" %d", &x);

    y = 1;
    while(x)
    {
        printf("%d%d\n", y++, x--);
    }

    return 0;
}
```

That's a nice solution. I have to really think all my options next time but i've been reading nested for loops and decided to apply that, clearly i have trouble with them.

Could you change the code to make it work? I can't see what's wrong.

TheComet - March 30, 2015, 6:14 am

Quote:i've been reading nested for loops and decided to apply that

It's not a nested loop problem. You cannot solve this using nested loops, because the output of nested loops would be n^2 , but you only have n outputs.

Sights101 - March 30, 2015, 8:19 am

You could do a two variable for loop if its easier for you to visualize...

```
Code #include <iostream>
using namespace std;
```

```
int main() {
    int x;
    cout << "Input a number" << endl;
    cin >> x;
    for (int i = 1, j = x; i <= x; ++i, --j) {
        cout << i << j << endl;
    }
}
```

0xDEAD10CC - March 30, 2015, 6:00 pm

I don't know why you guys are making this so difficult... Anyone notice that the values are increments of 9? lol! ?

Here, a good mathematical way to solve this:

```
Code int input = 9;
for (int i = 0, x = input + 10; i < input; ++i, x += 9)
{
    printf("%d\n", x);
}
```

Works for $1 \leq \text{input} \leq 9$.. I wouldn't know what kind of output you'd expect if input was 0... Perhaps just "0"? or "00"? (Your example starts at 1 however)... Or if input was greater than 9.