01_08-Assignment Problems

Monday, 1 August 2022 8:07 PM

do-while

Entry Controlled } for, while

```
for (i=0; i<=10; i++)
{
  - - - - .
}
```

Entry

```
while (__)
{
}
```

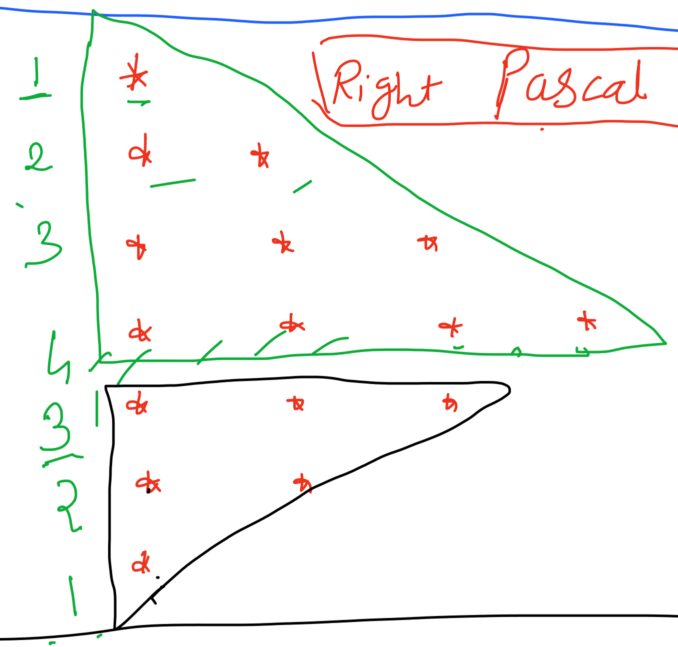
do-while

```
do
{
  - - - - .
  - - . .
}
while ( __ )
```

15 People

Q

Right Pascal Δ



8:17

8:27

10min

Arrays

Recursion

Q

0 1 1 2 3 5 8 13 21 } . . . .

Fibonacci Series

temp, Prev, curr

0 (1) (1) 2 3

curr = temp + Prev = 1+1=2

0+1

```
temp = prev;
Prev = Curr;
Curr = temp+Prev
```

```
else{
    for(i = 2; i <=n; i++){
        temp = prev;
        prev = curr;
        output = `${output + curr} `;
        curr = temp + prev;
    }
}
```

curr
output 3 => 8 es

Q. Factorial

3!
↳ 3 x 2!
↳ 3 x 2 x 1!
3 x 2 x 1
6

1! => 1

5!
↳ 5 x 4!
↳ 5 x 4 x 3!
↳ 5 x 4 x 3 x 2!
5 x 4 x 3 x 2 x 1!
5 x 4 x 3 x 2 x 1
120

n! -> n x (n-1) x (n-2) x 1

n = 8] factorial

4! => 24
↳ 4 * fact(3) (6)
↳ 3 * fact(2) (2)
2 * fact(1) (1)
1 * fact(0)
1

n * fact(n-1)

Q. factorial } without recursion. }

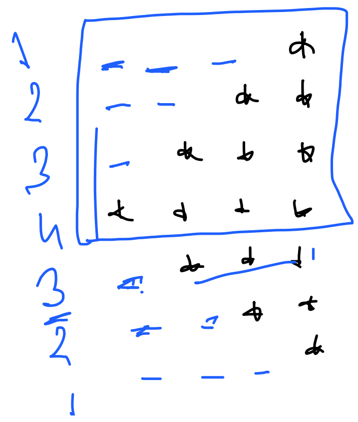
```
var num = 5;

if(num < 0){
    console.log("Negative Factorial can not be done");
}

else if (num == 0){
    console.log("Factorial of 0 is 1.")
}

else{
    var fact = 1;
    for(i = 1 ; i <= num ; i++){
        fact = fact * i;
    }
    console.log(`Factorial of ${num} is ${fact}`)
}
```

Q.



Left Pascal Δ

10 mins

n-rows = 8 stars