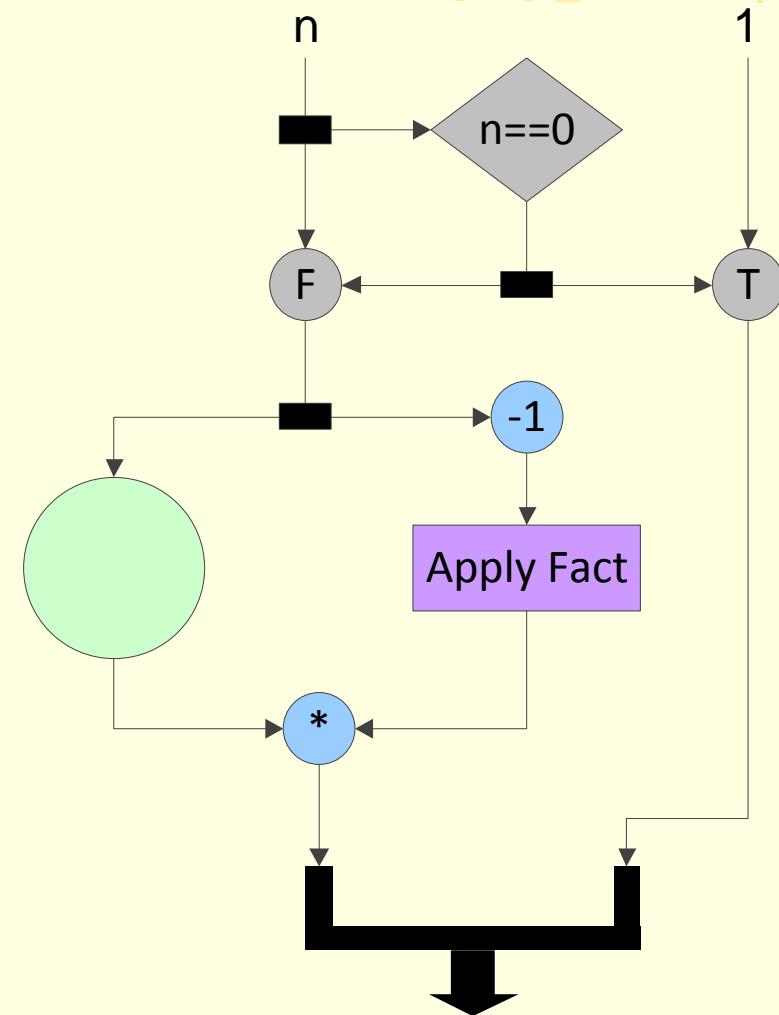


# Factorial

## The Normal Version – Dynamic Dataflow

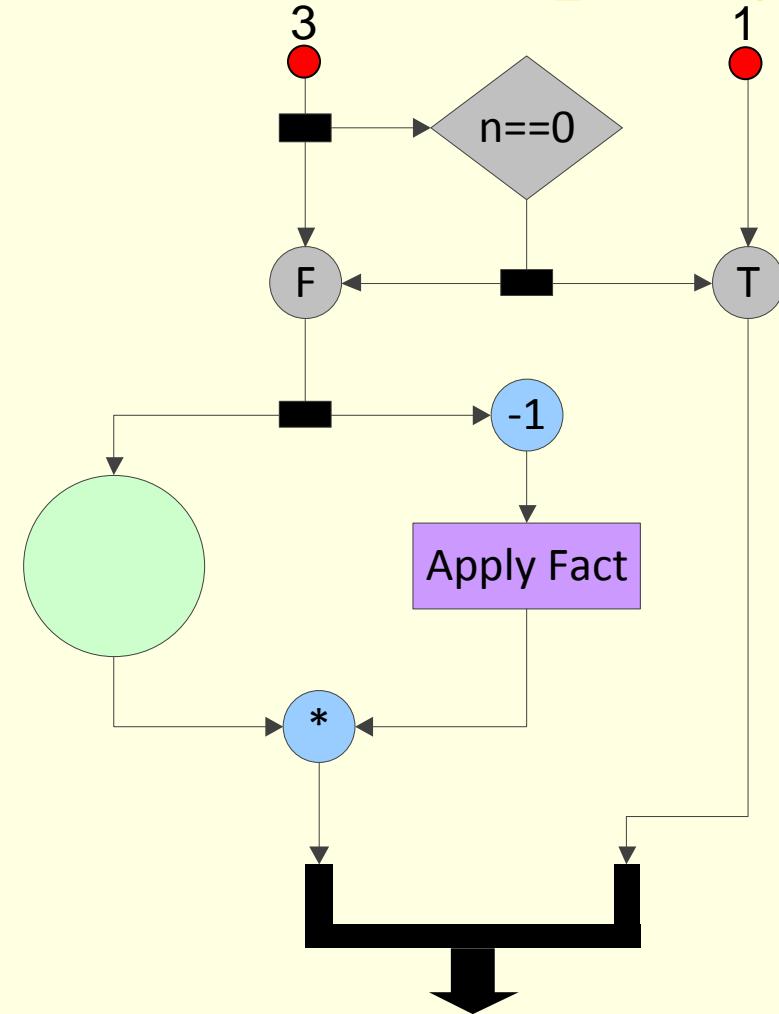


*fact(3)*

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

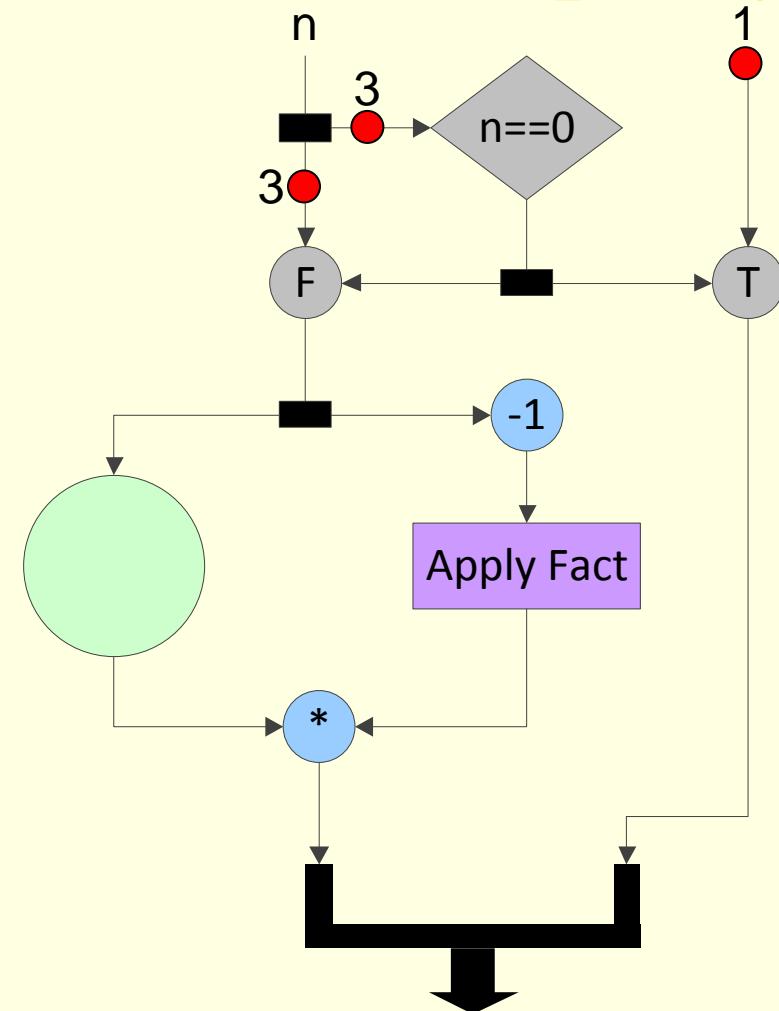


$\text{fact}(3)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

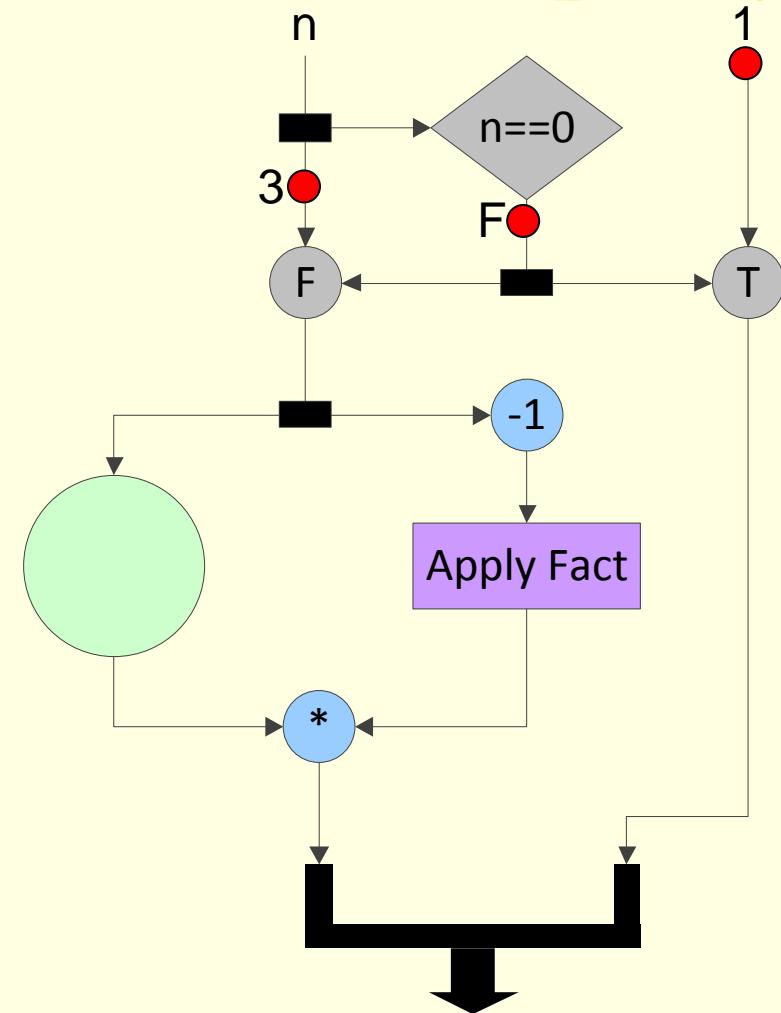


$\text{fact}(3)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

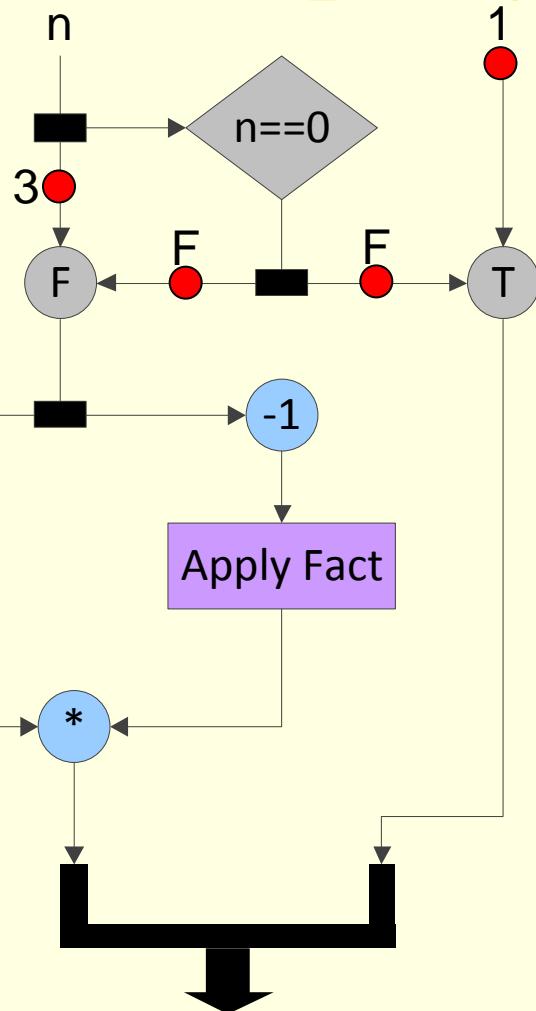


$\text{fact}(3)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

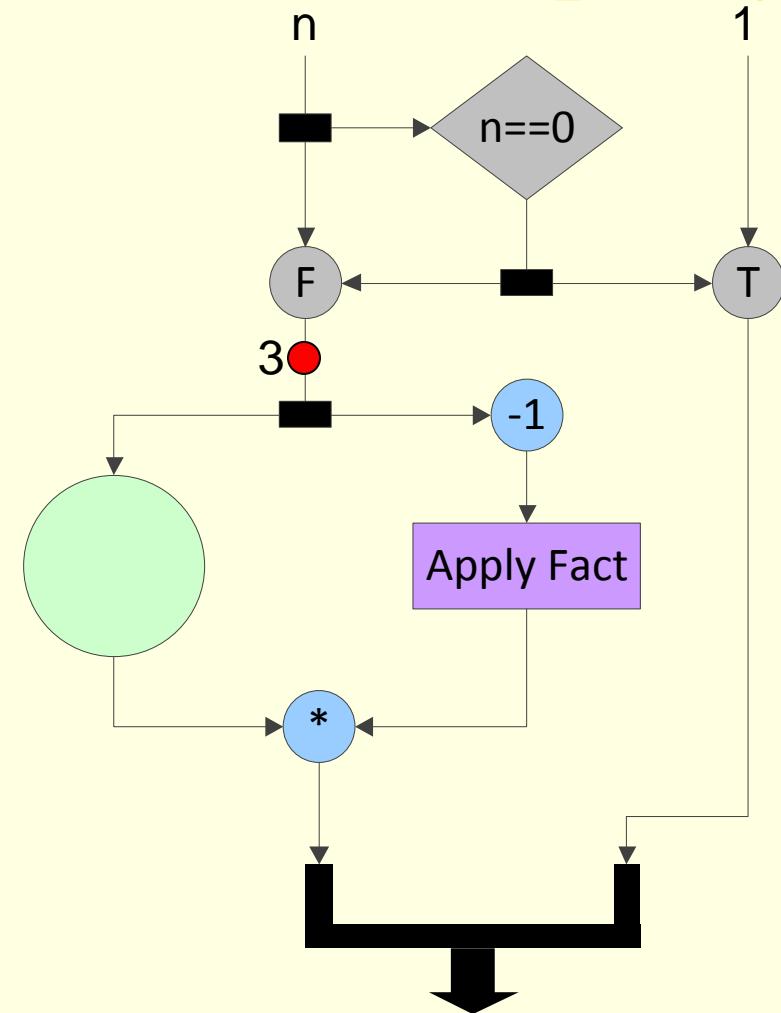


$fact(3)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

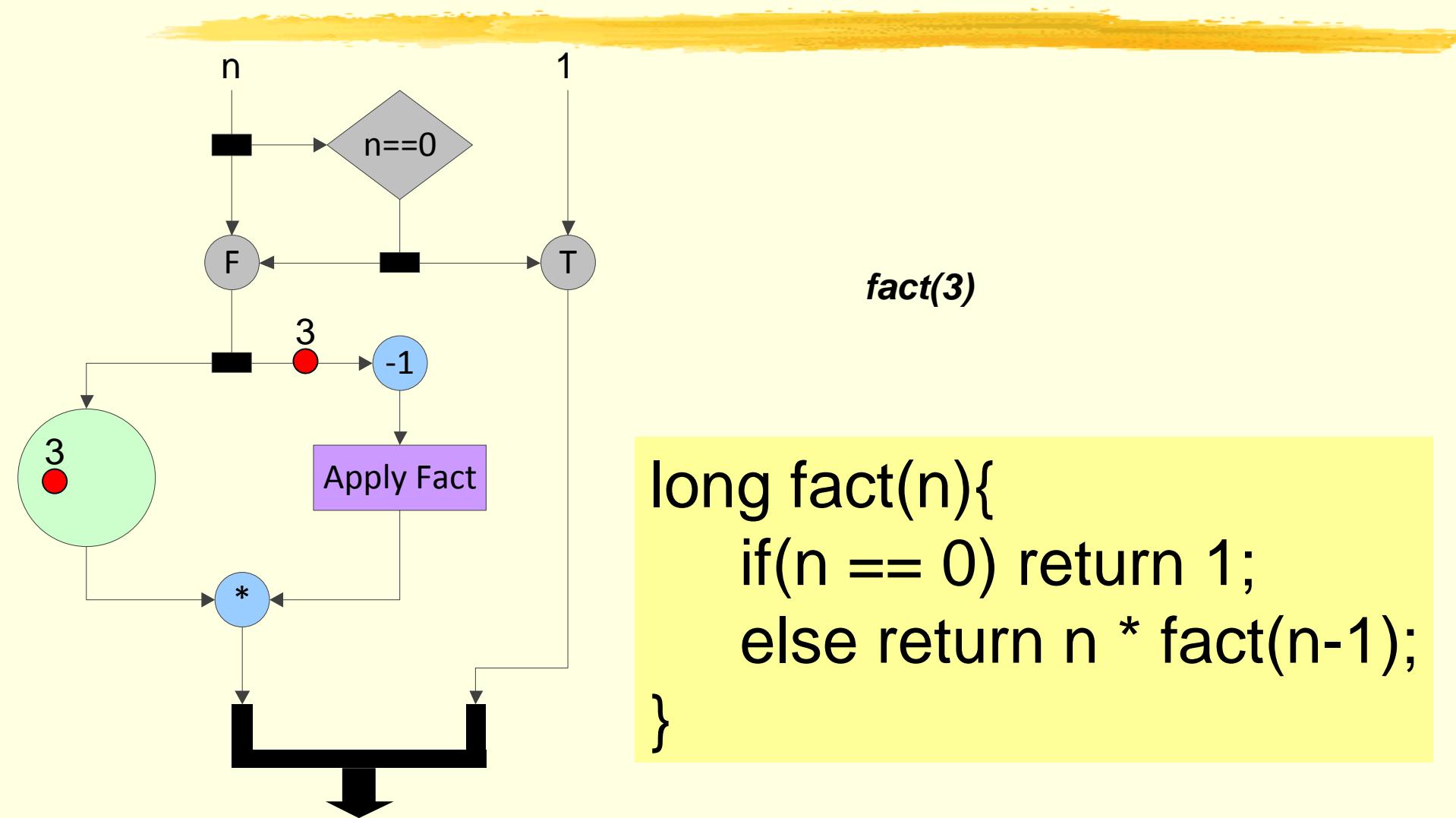


$fact(3)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

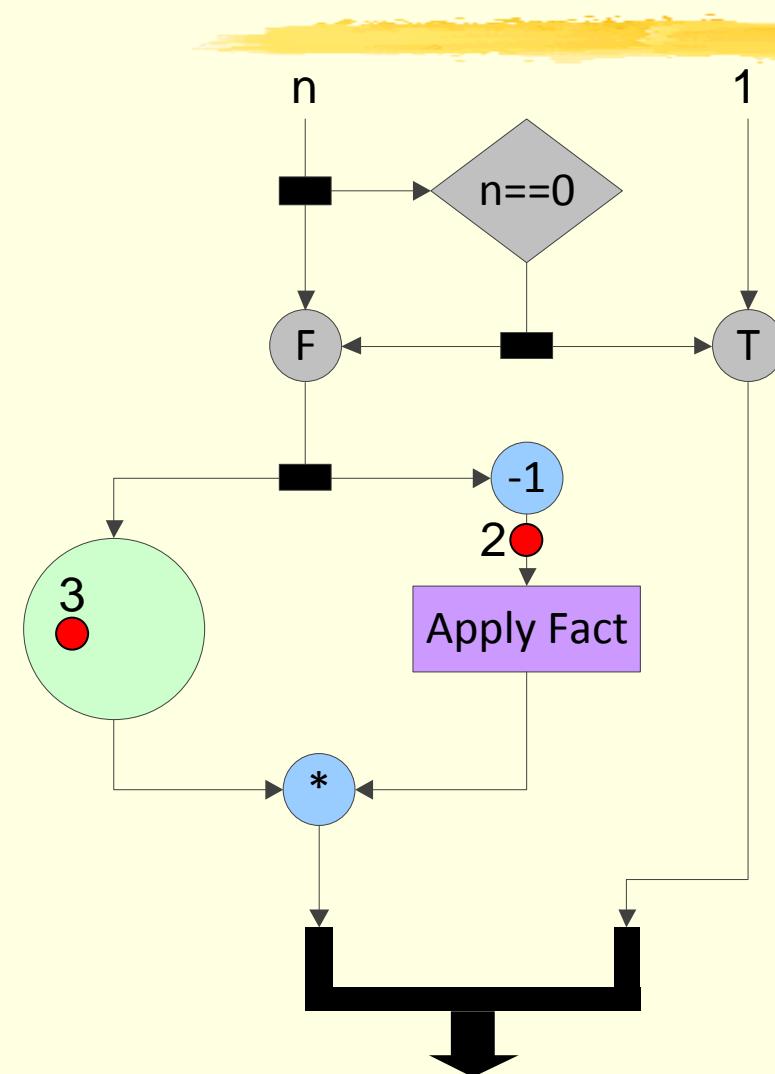
# Factorial

## The Normal Version – Dynamic Dataflow



# Factorial

## The Normal Version – Dynamic Dataflow

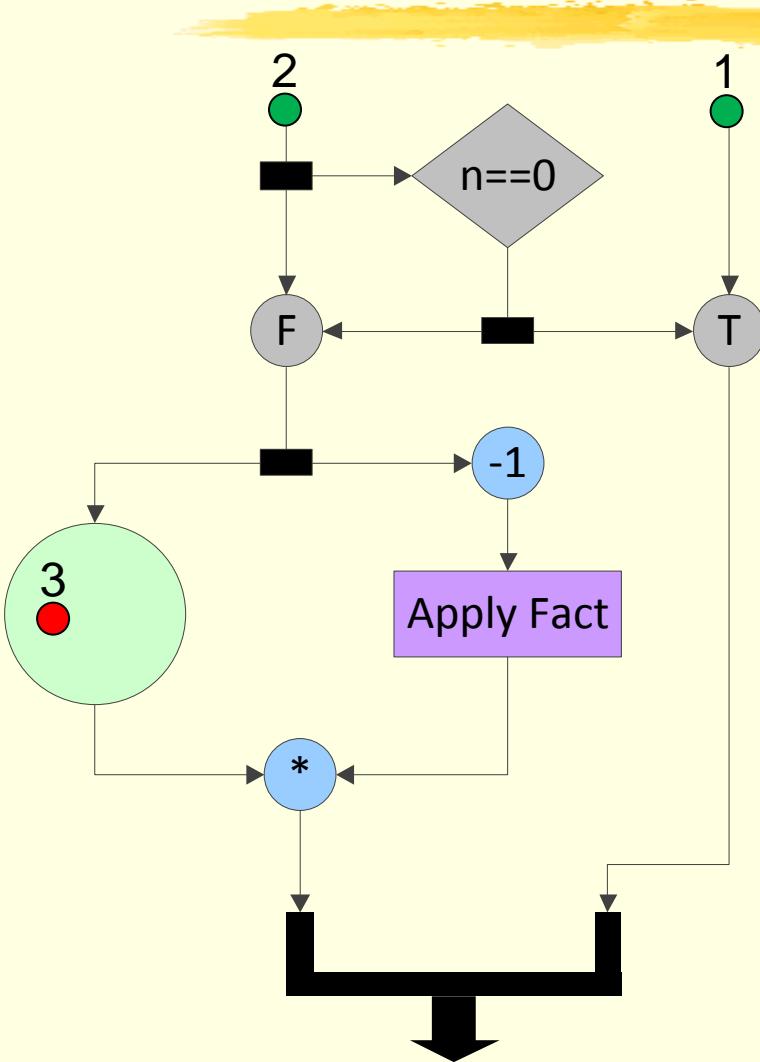


*fact(3)*

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

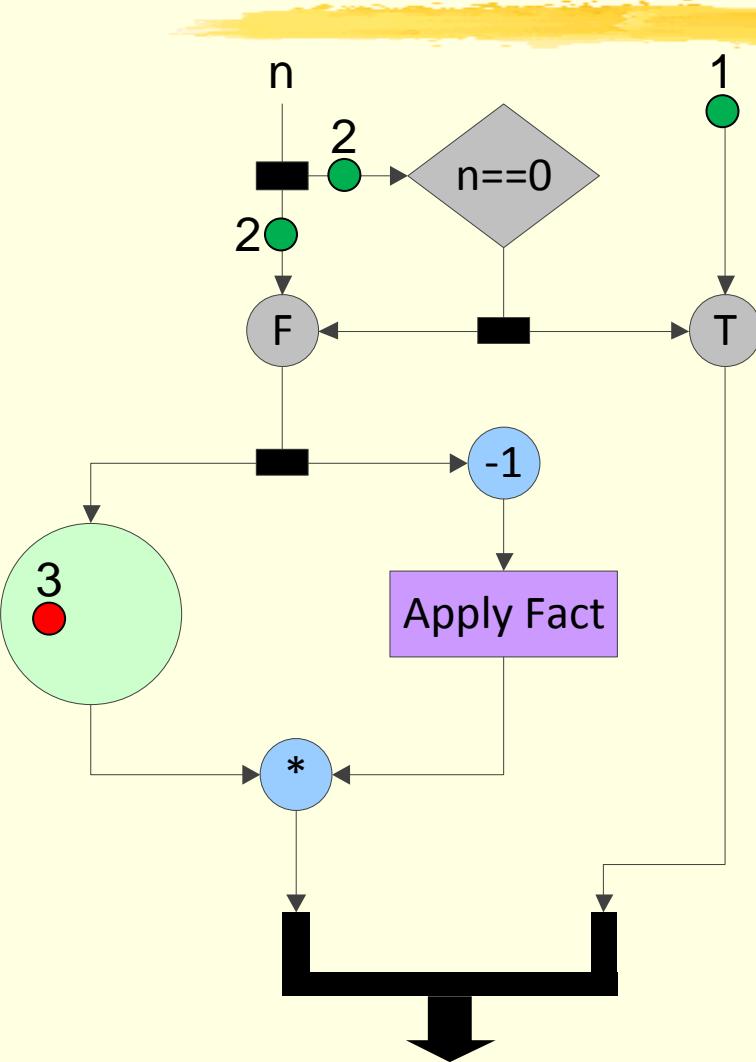


$3 * \text{fact}(2)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

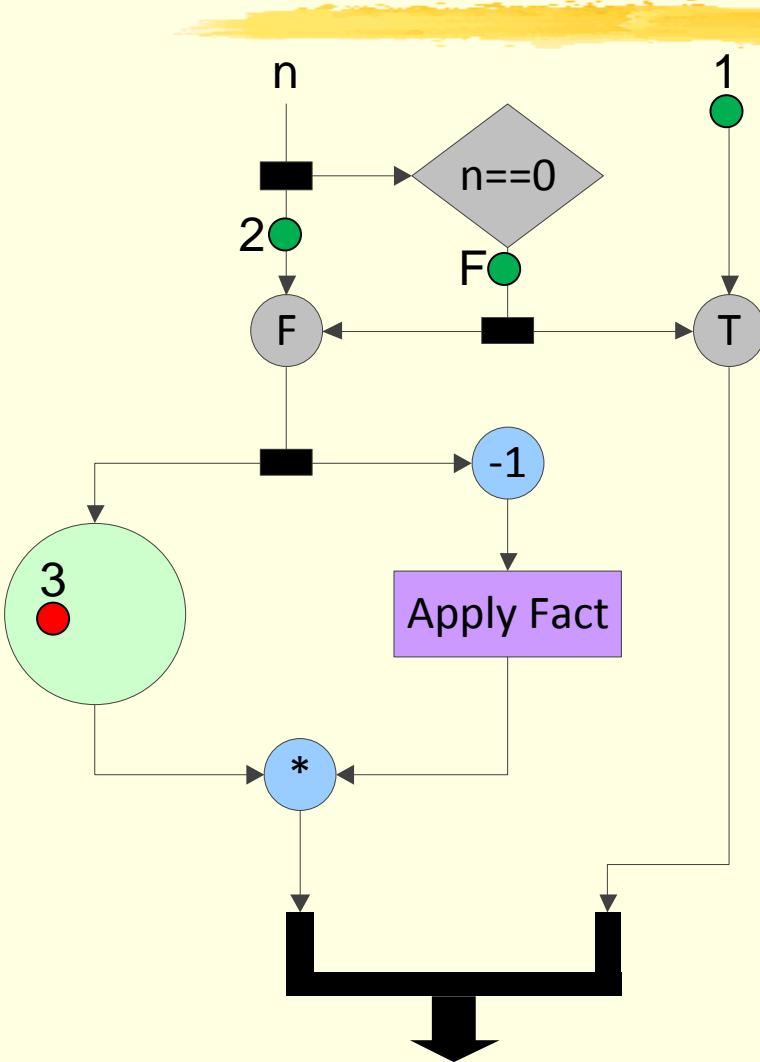


$3 * \text{fact}(2)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

# The Normal Version – Dynamic Dataflow

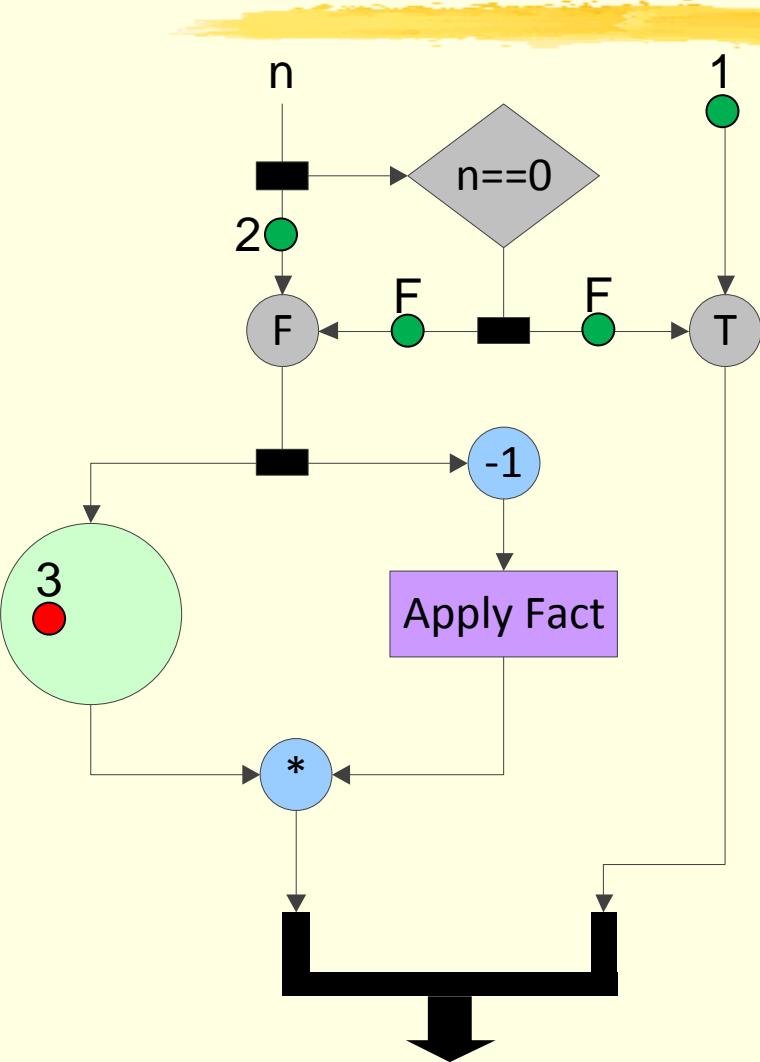


**3 \* fact(2)**

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

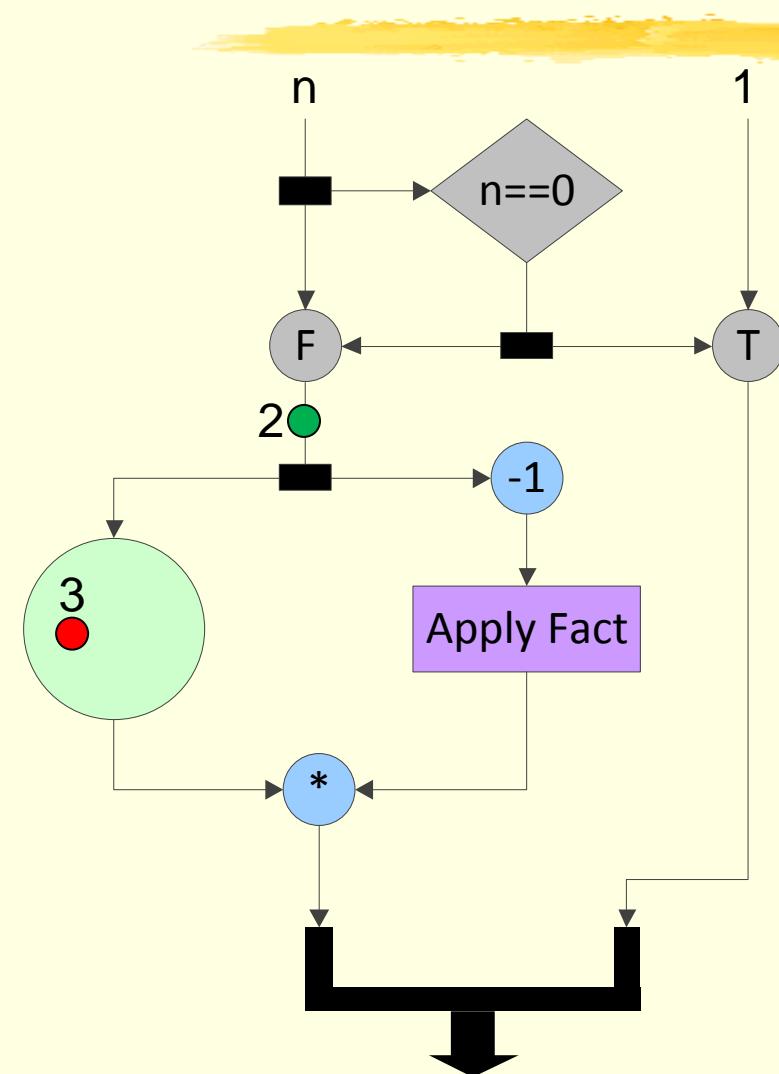


$3 * \text{fact}(2)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

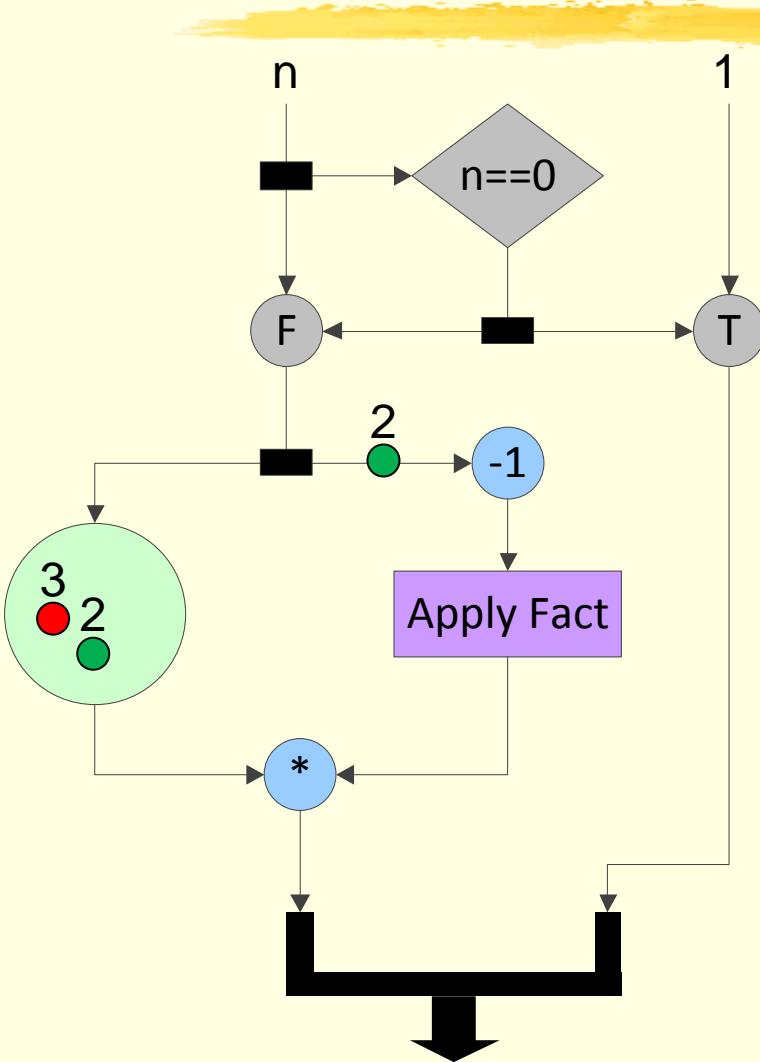


$3 * fact(2)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

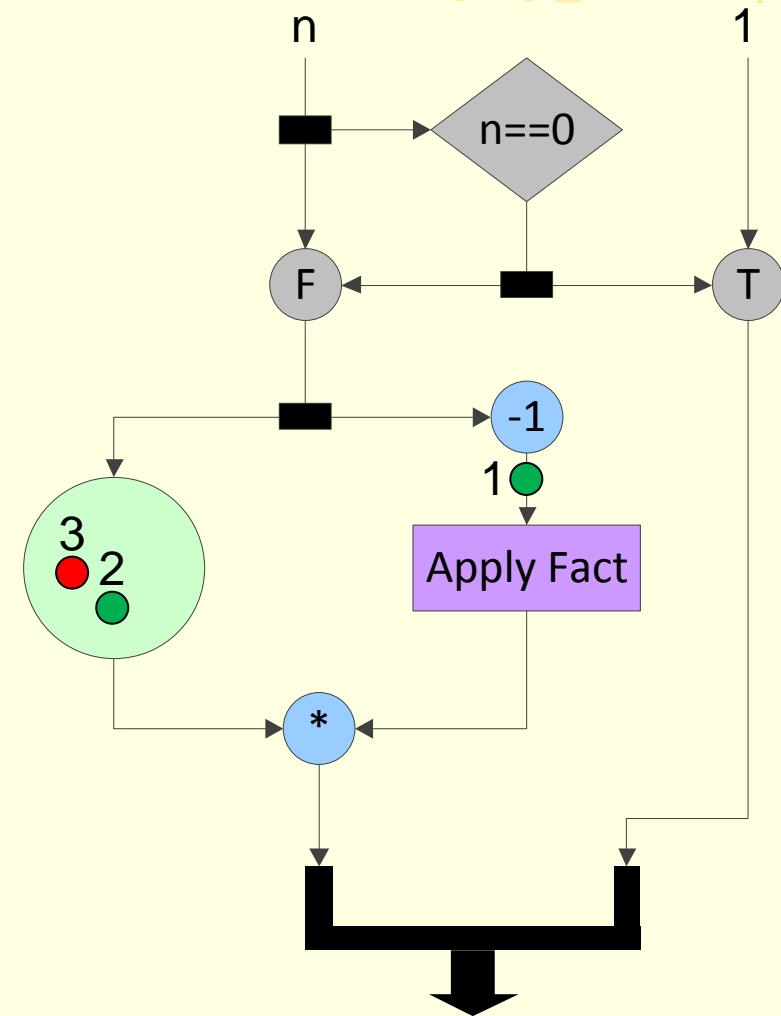


$3 * \text{fact}(2)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

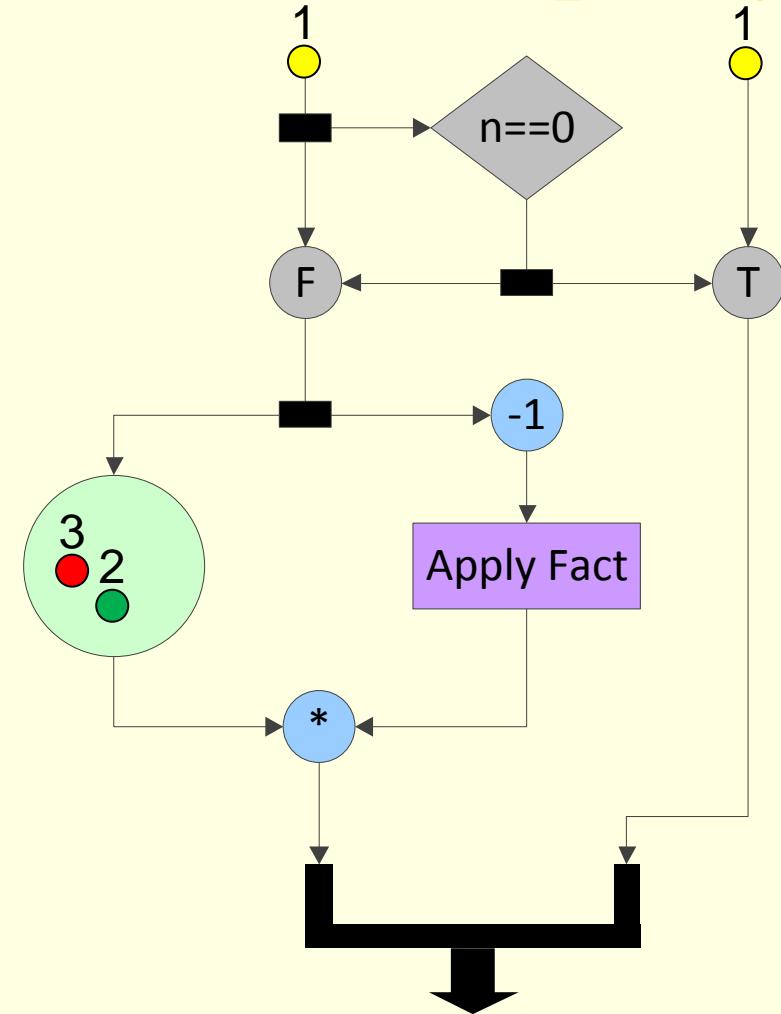


$3 * \text{fact}(2)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

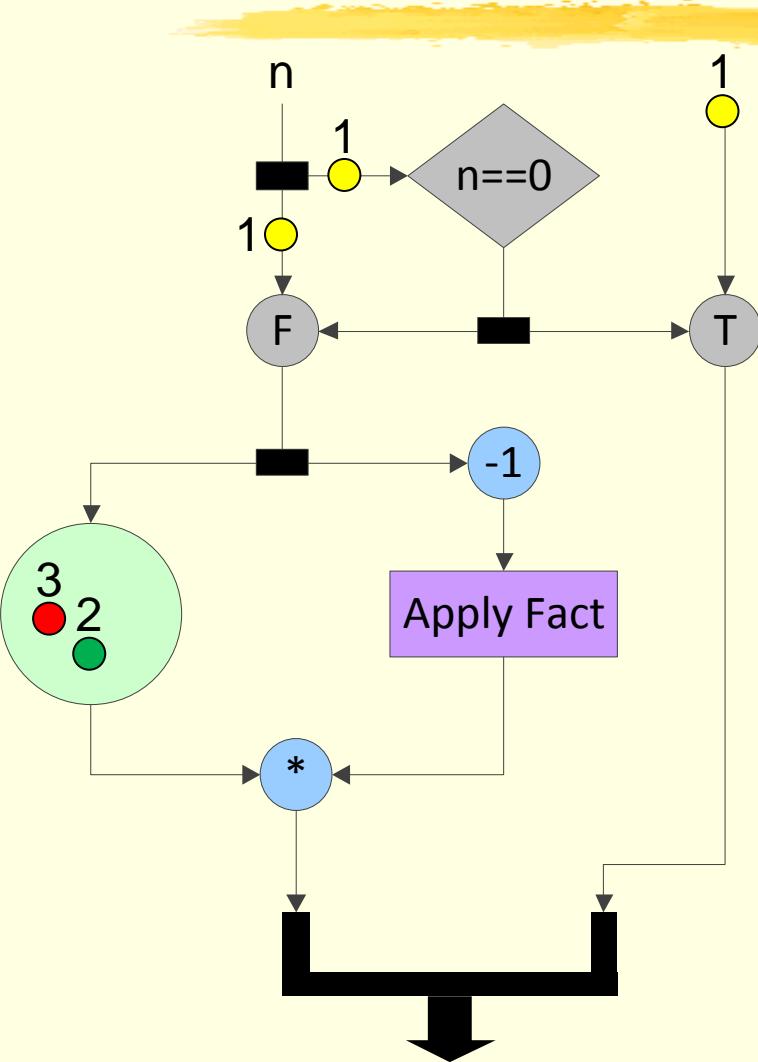


$3 * \text{fact}(2 * \text{fact}(1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

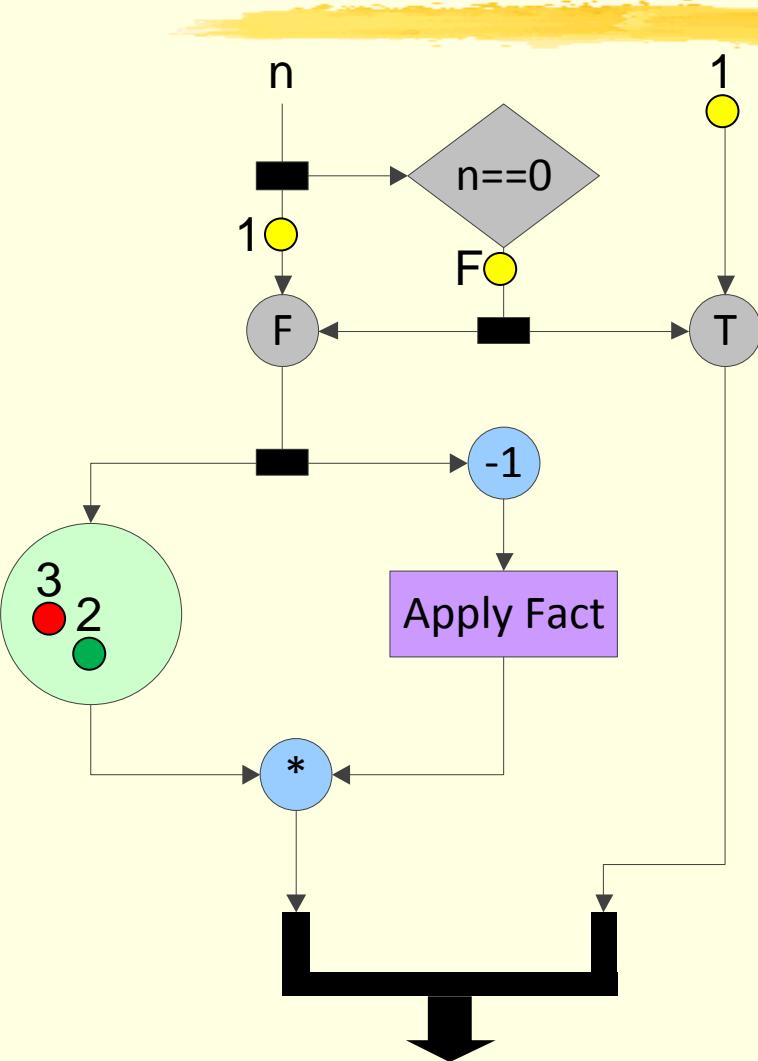


$3 * \text{fact}(2 * \text{fact}(1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

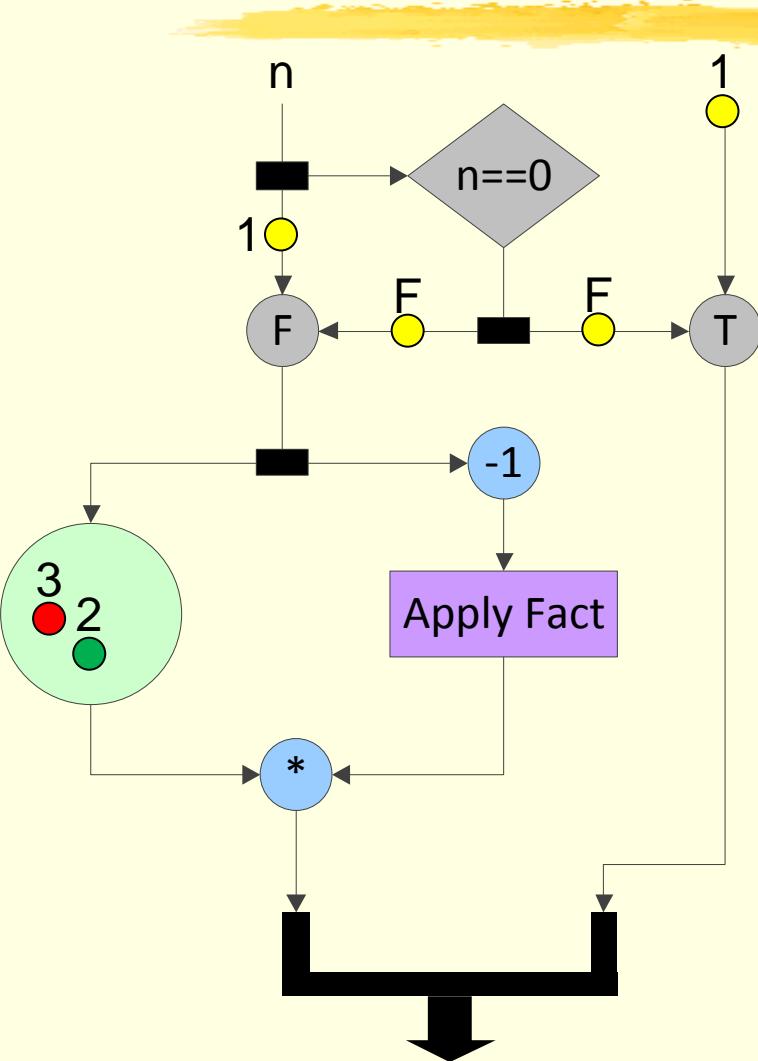


$3 * \text{fact}(2 * \text{fact}(1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

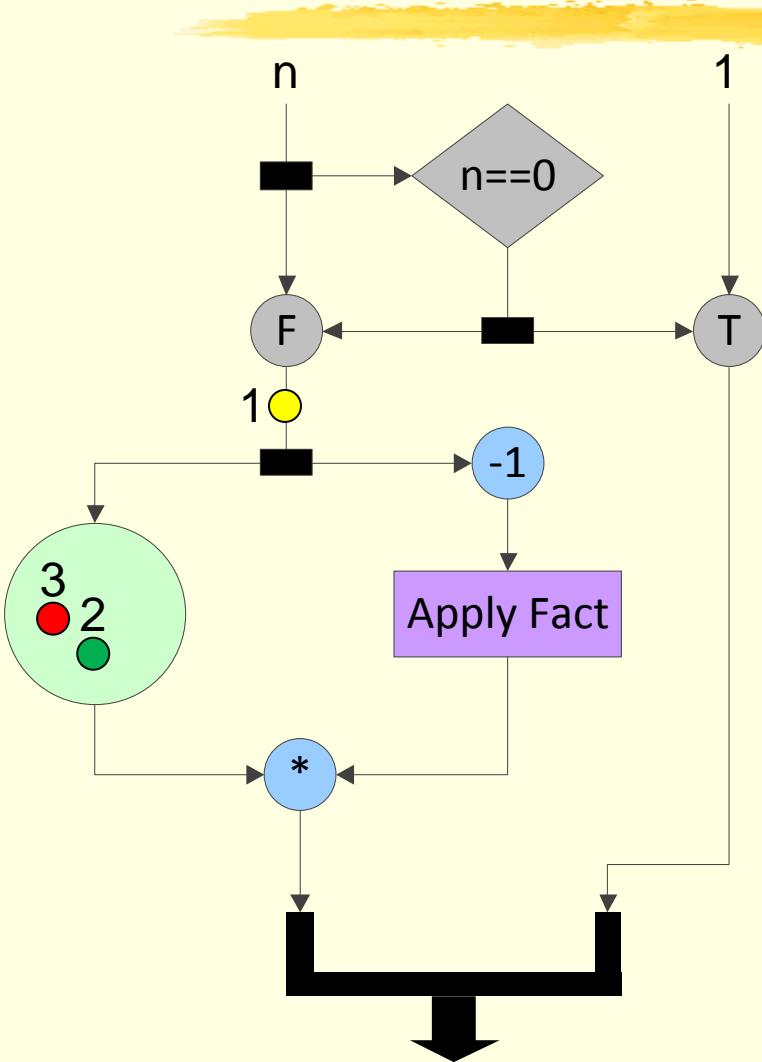


$$3 * \text{fact}(2 * \text{fact}(1))$$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

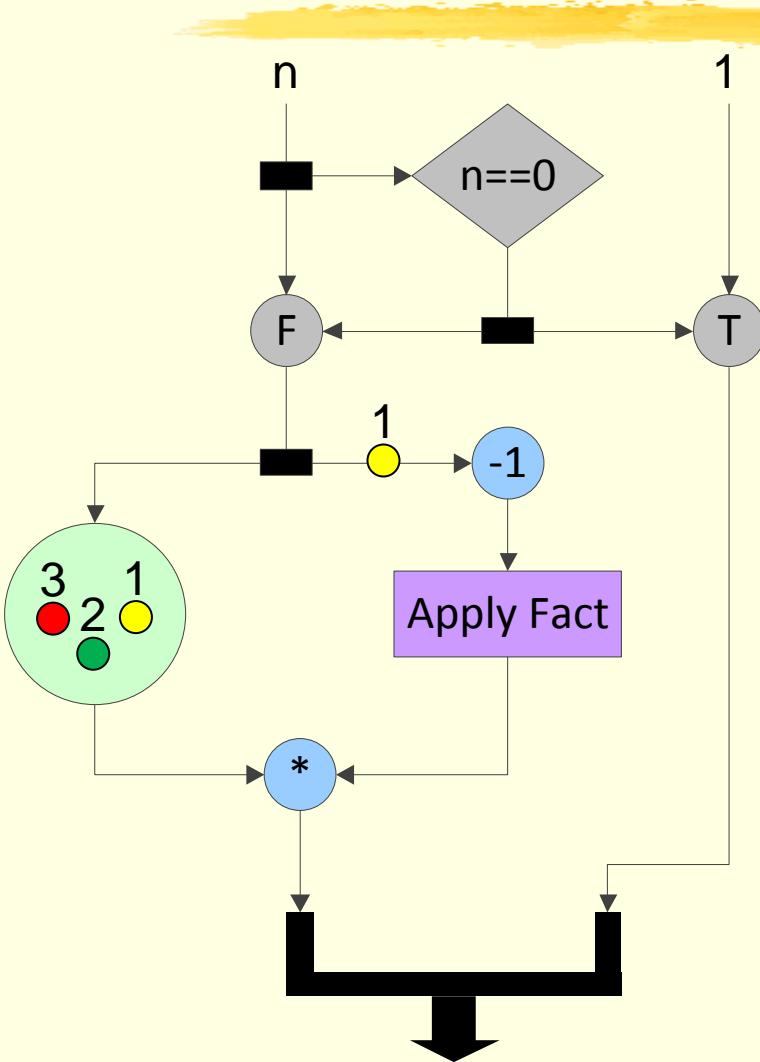


$3 * \text{fact}(2 * \text{fact}(1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

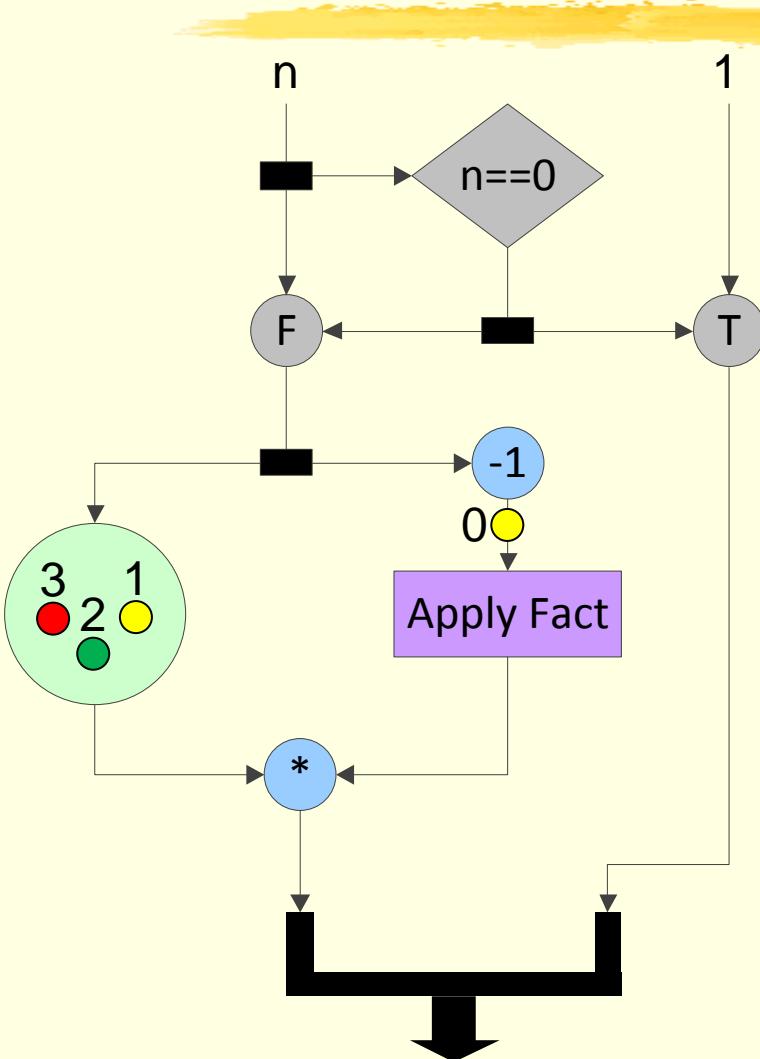


$3 * \text{fact}(2 * \text{fact}(1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

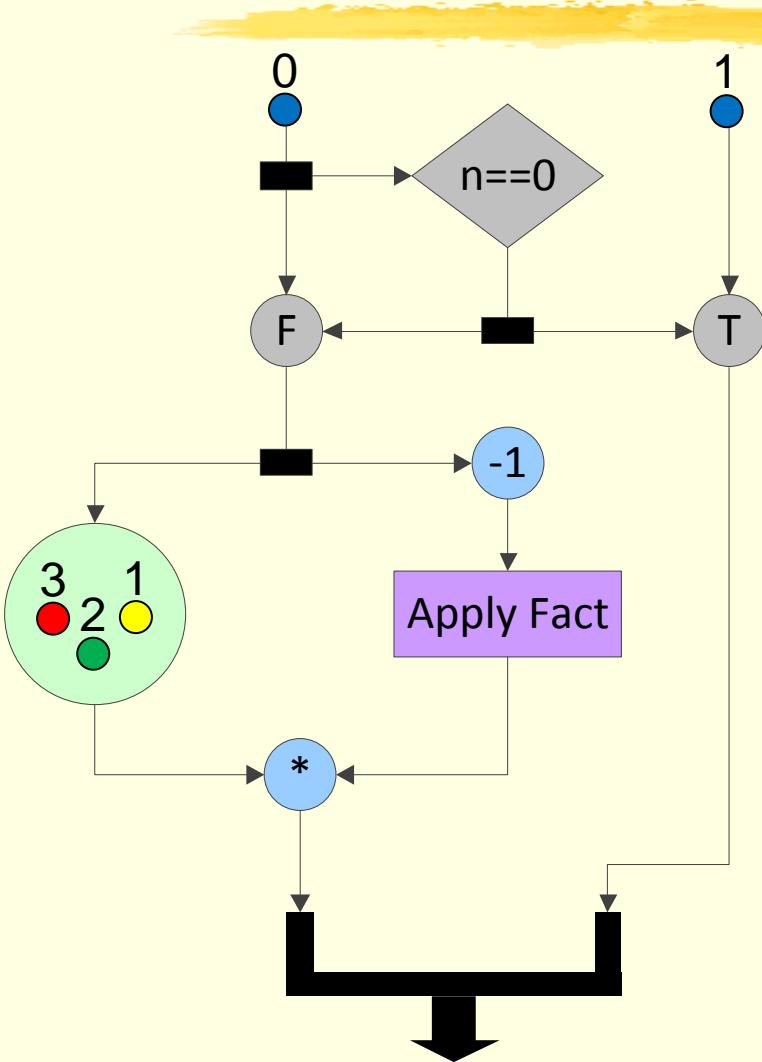


$$3 * \text{fact}(2 * \text{fact}(1))$$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

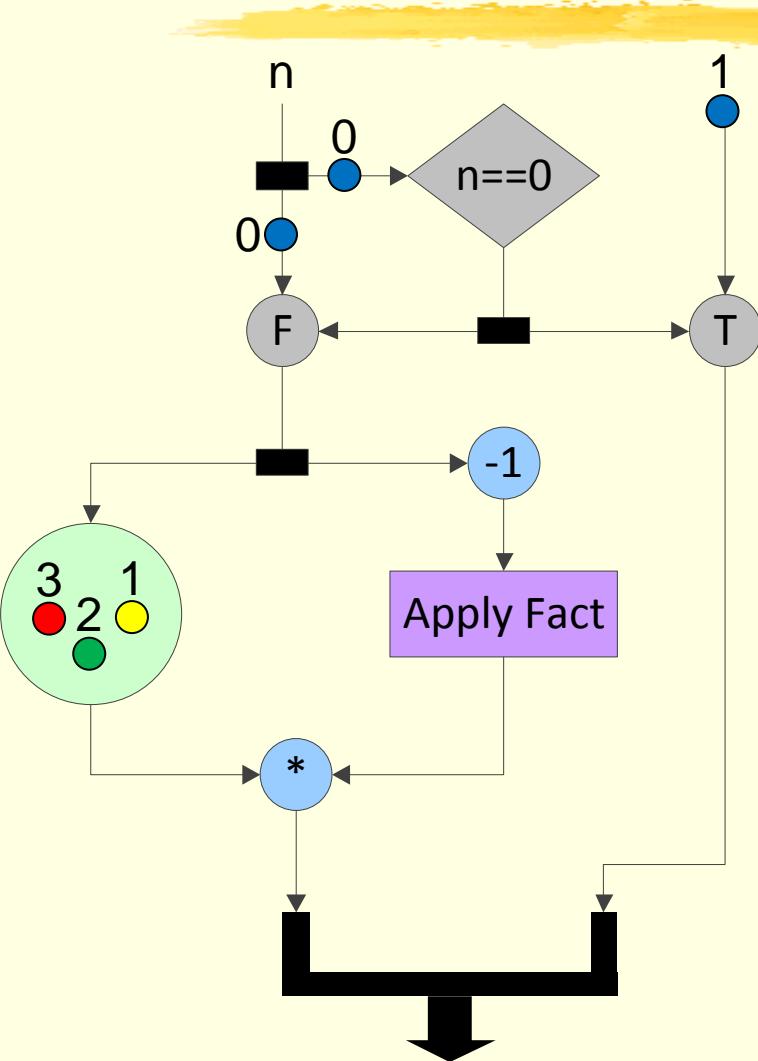


$3 * \text{fact}(2 * \text{fact}(1 * \text{fact}(0)))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

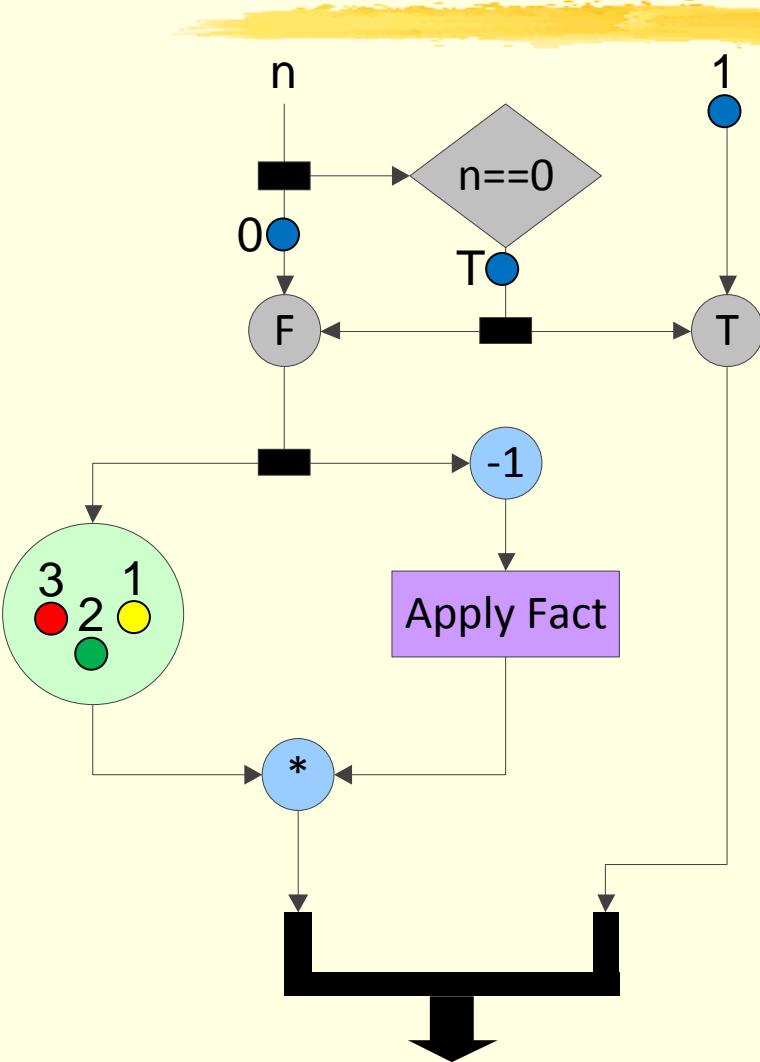


$3 * \text{fact}(2 * \text{fact}(1 * \text{fact}(0)))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

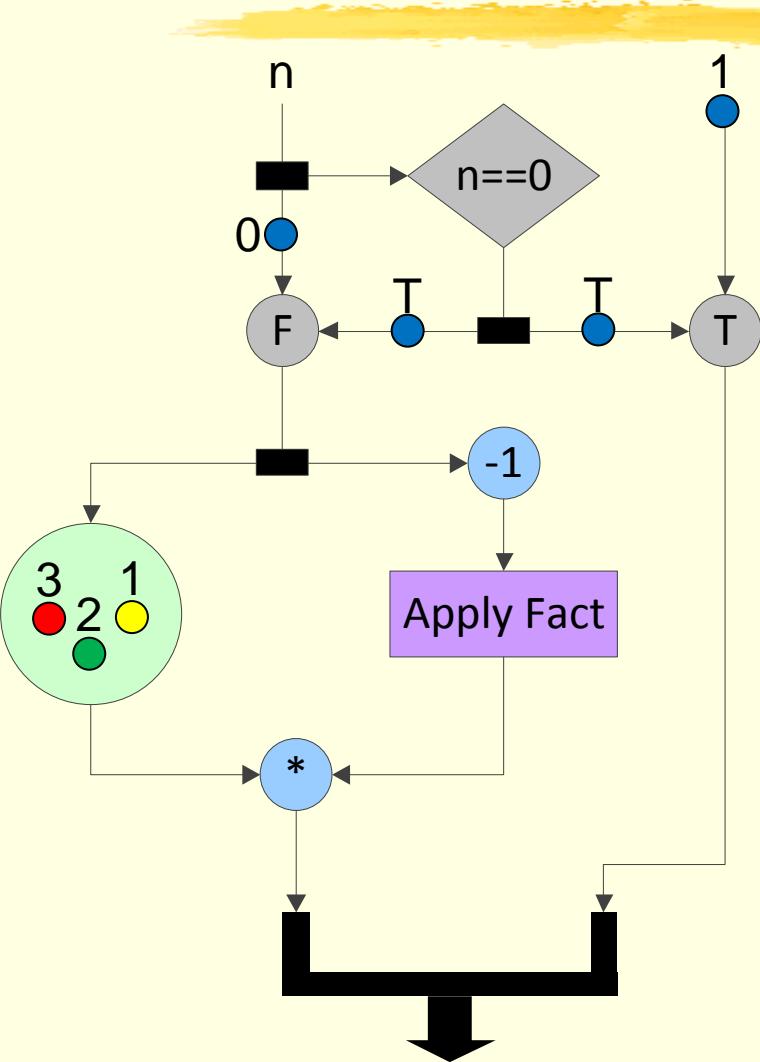


$3 * \text{fact}(2 * \text{fact}(1 * \text{fact}(0)))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

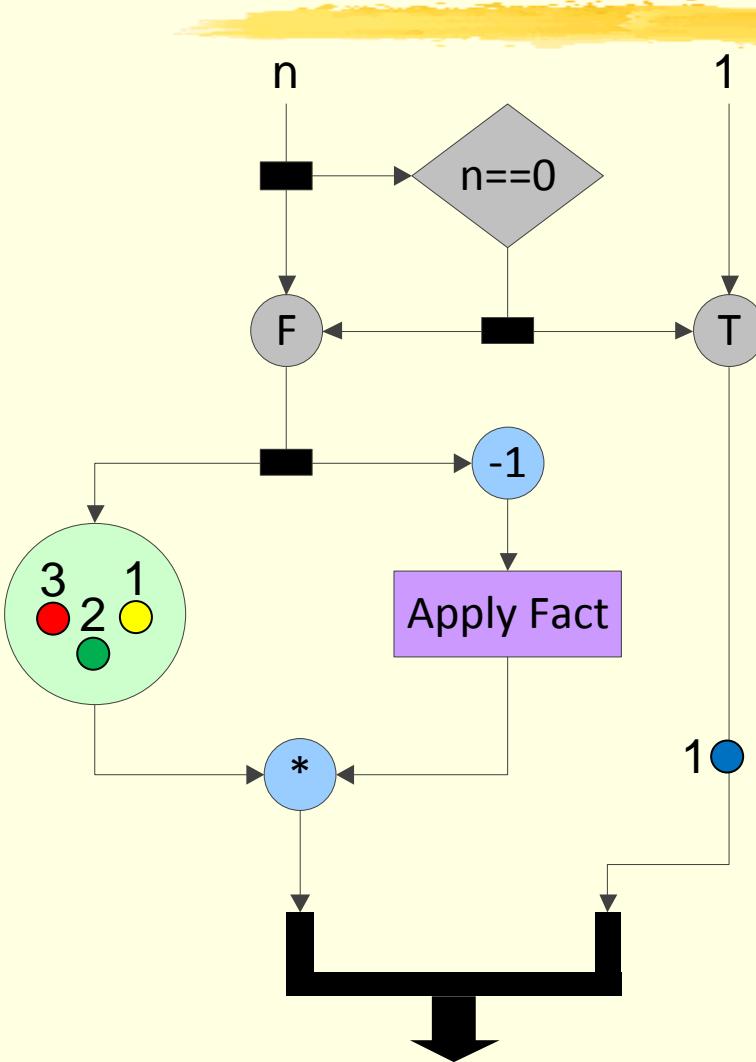


$3 * \text{fact}(2 * \text{fact}(1 * \text{fact}(0)))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

# The Normal Version – Dynamic Dataflow

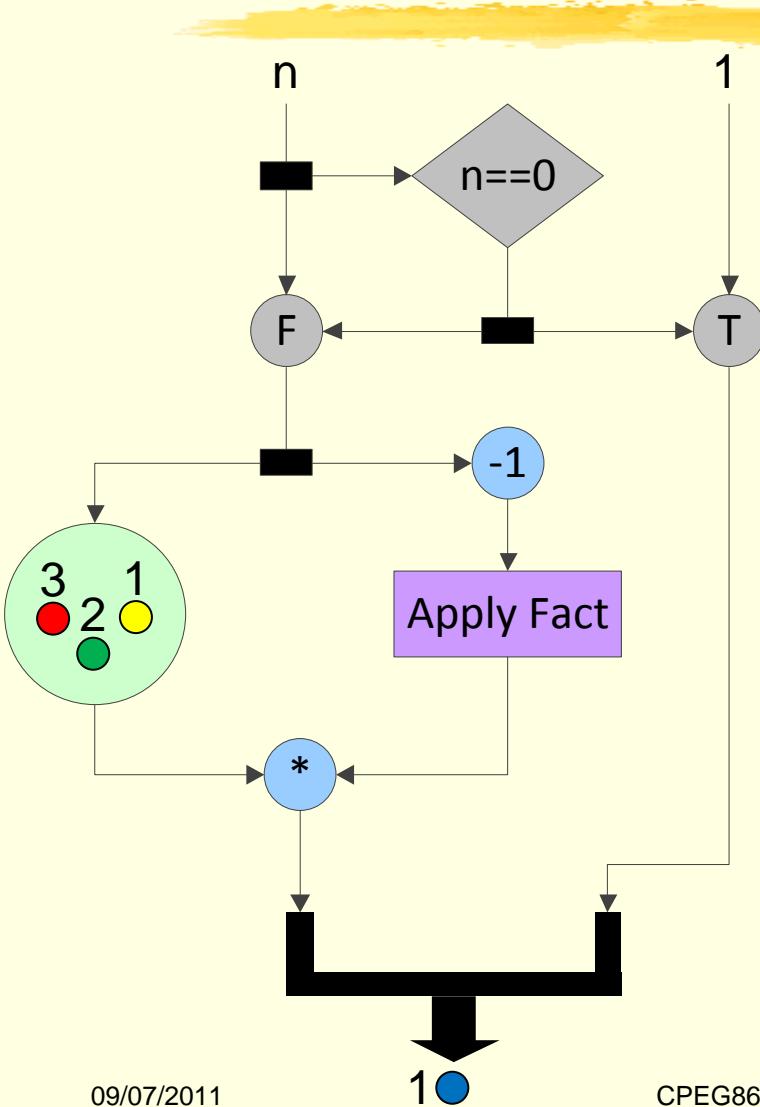


**3 \* fact(2 \* fact(1 \* fact(0)))**

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

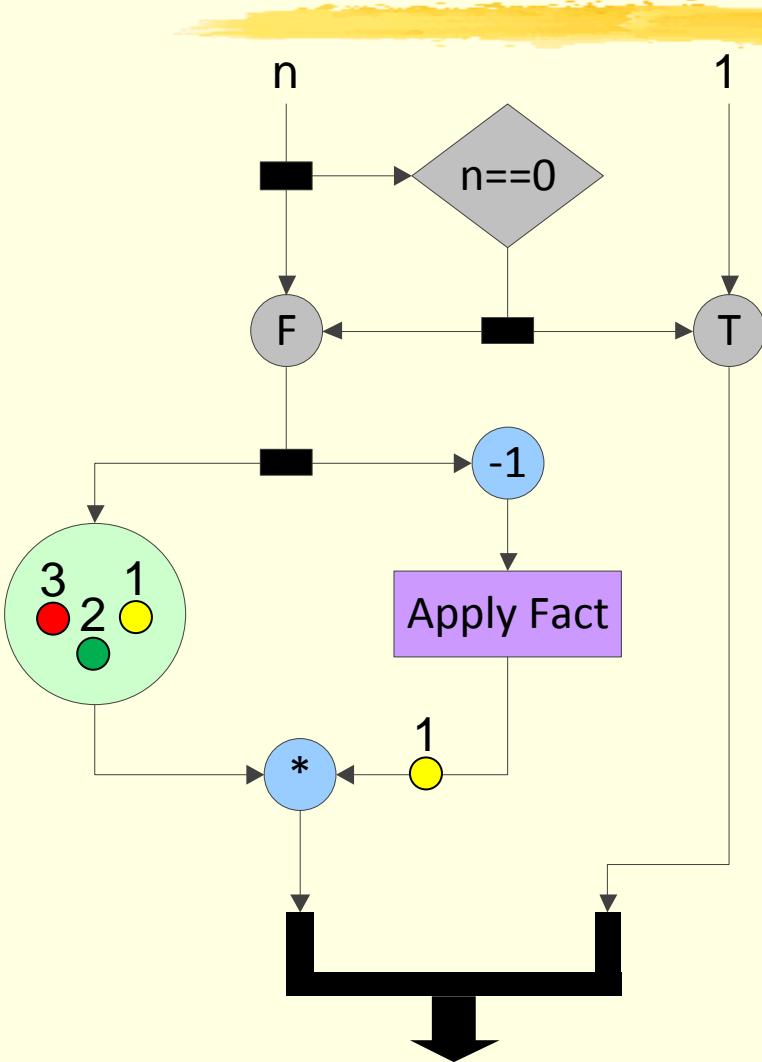


$3 * \text{fact}(2 * \text{fact}(1 * \text{fact}(0)))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

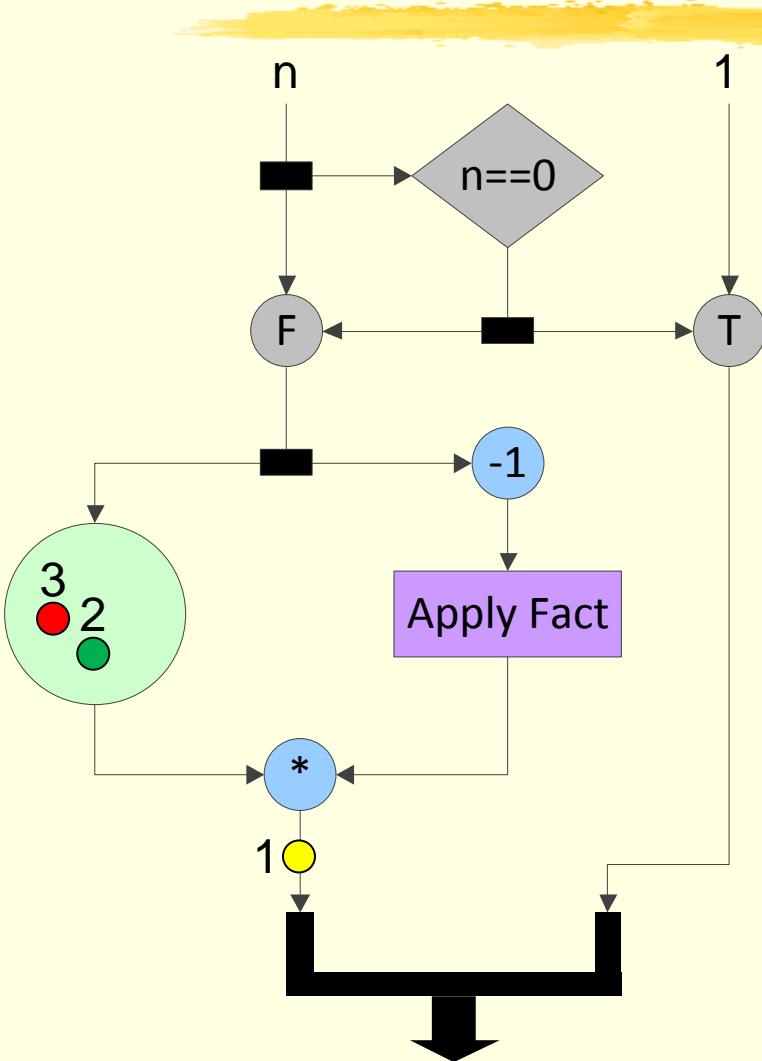


$3 * \text{fact}(2 * \text{fact}(1 * 1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

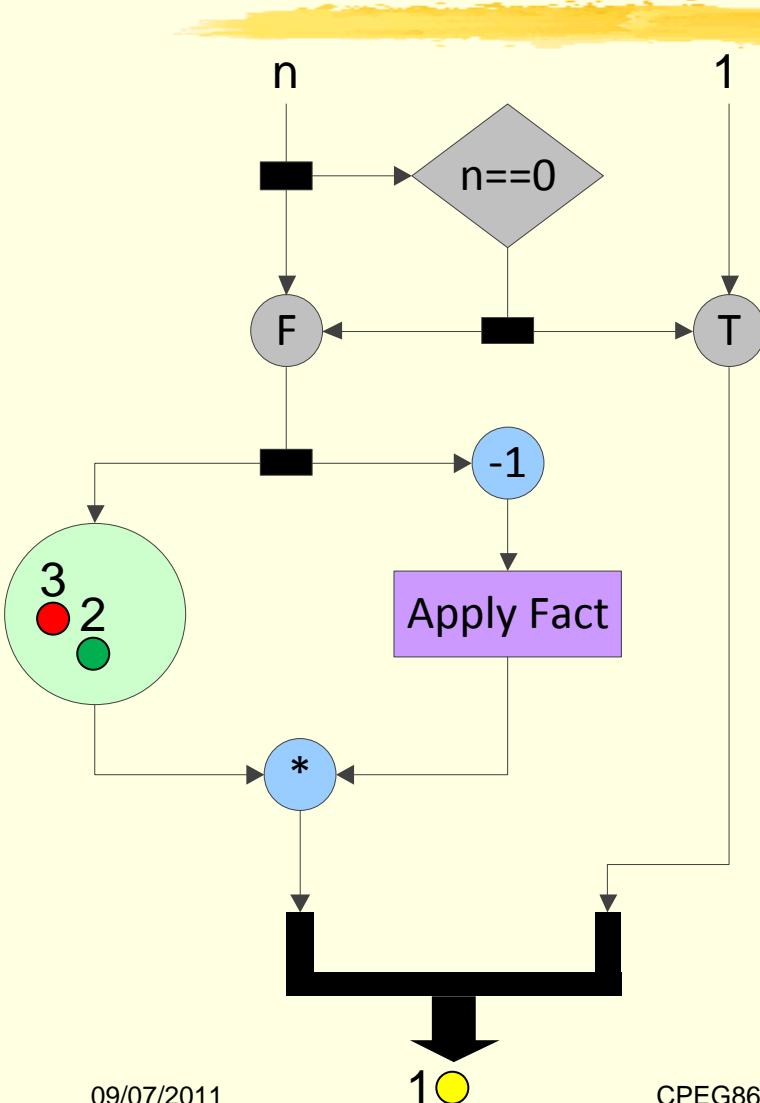


$3 * \text{fact}(2 * \text{fact}(1 * 1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

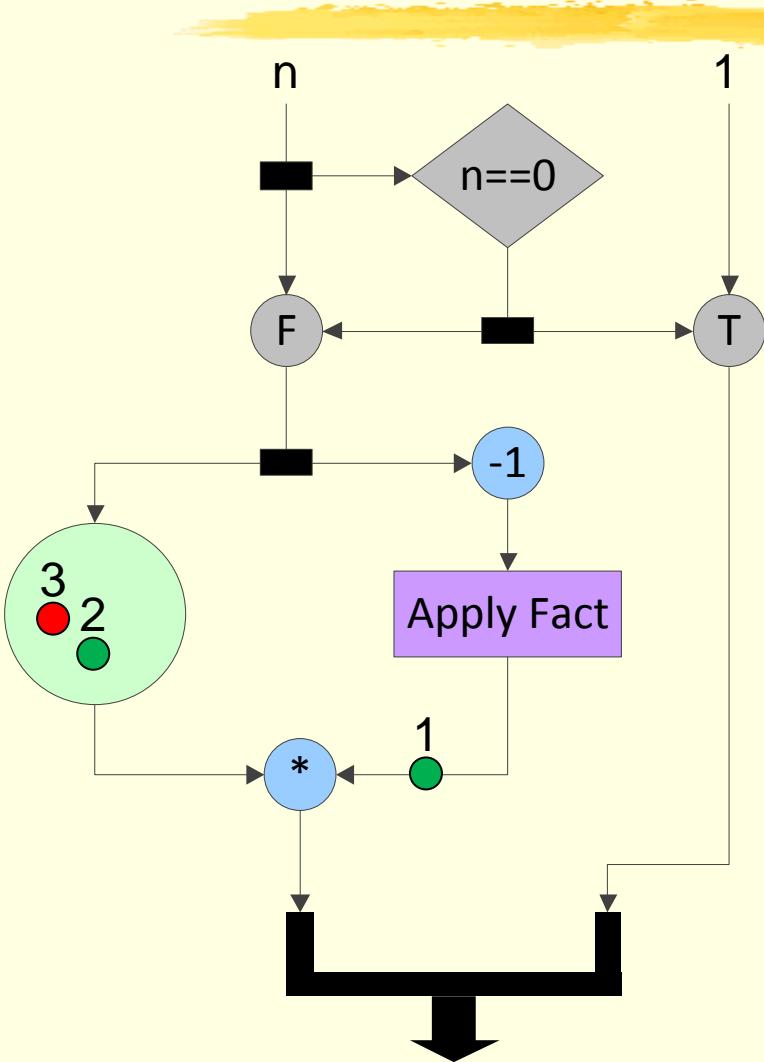


$3 * \text{fact}(2 * \text{fact}(1 * 1))$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

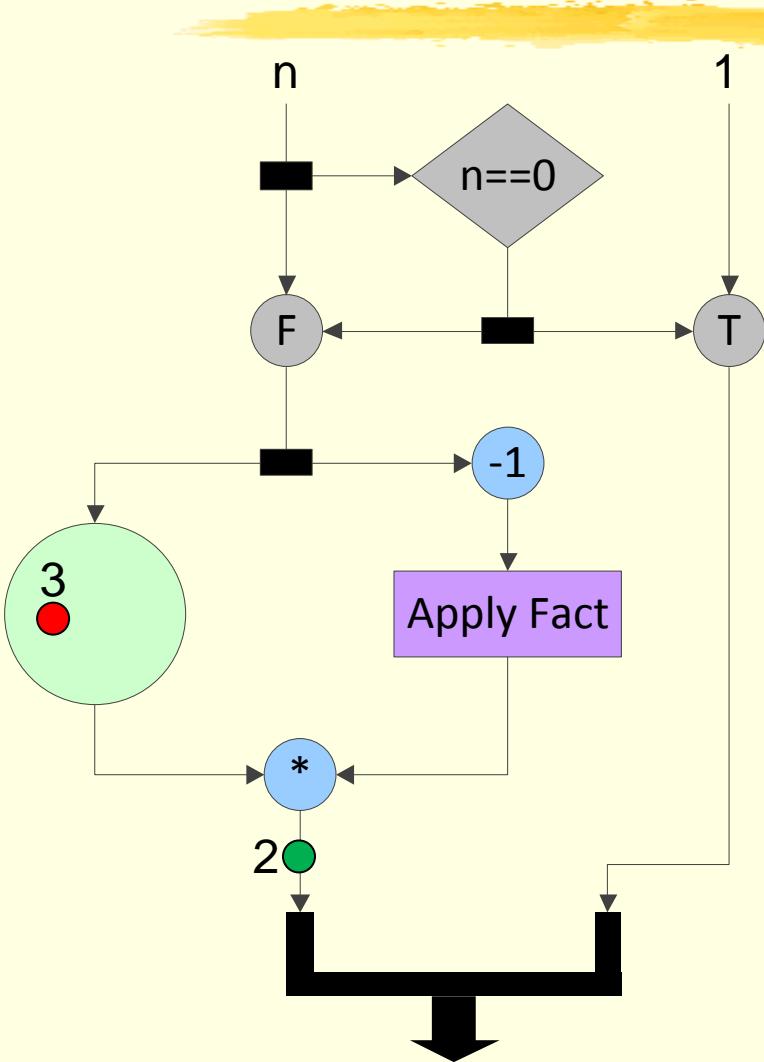


$3 * fact(2 * 1)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

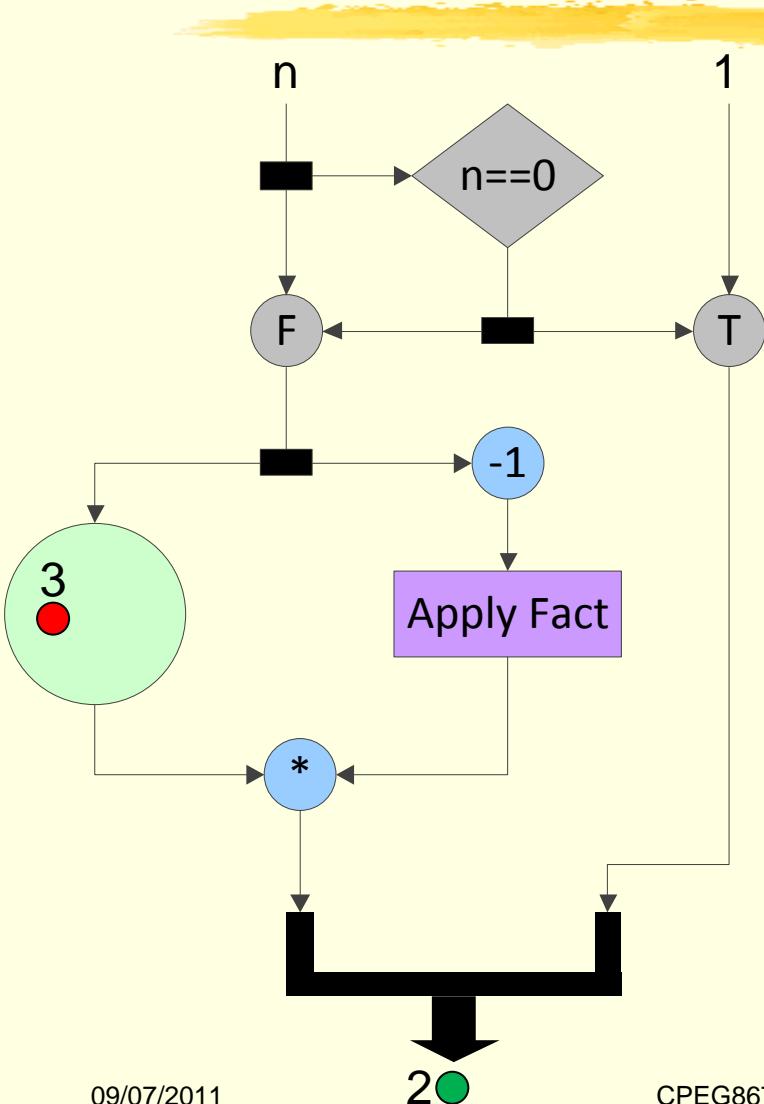


$$3 * \text{fact}(2 * 1)$$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

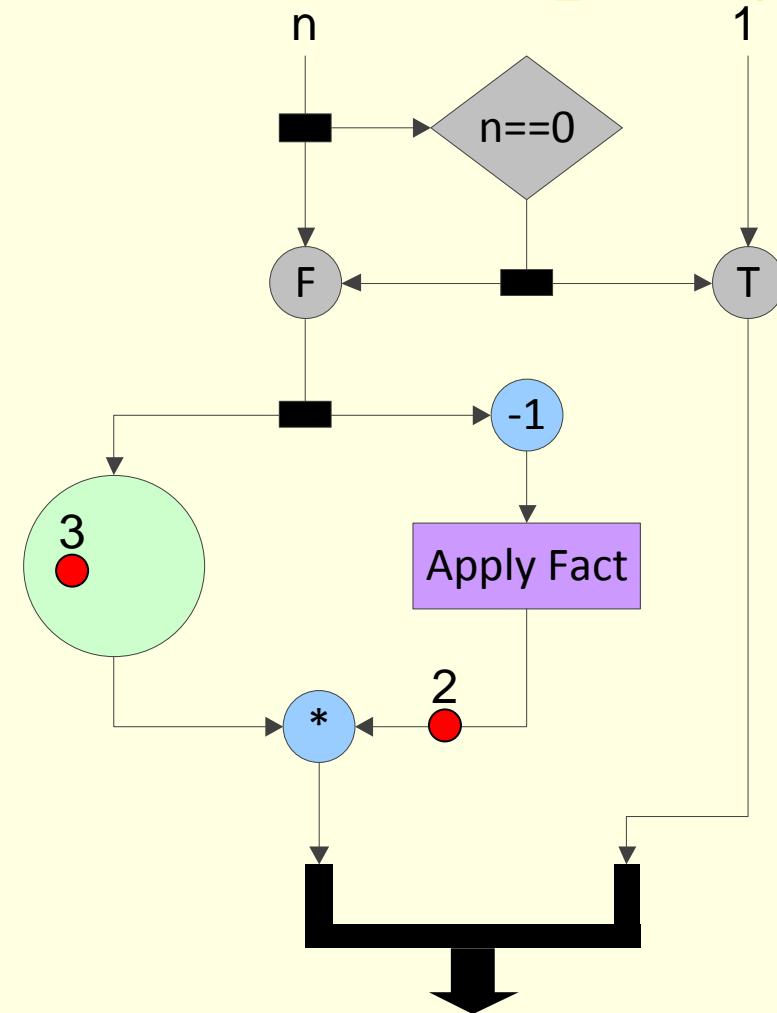


$3 * \text{fact}(2 * 1)$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

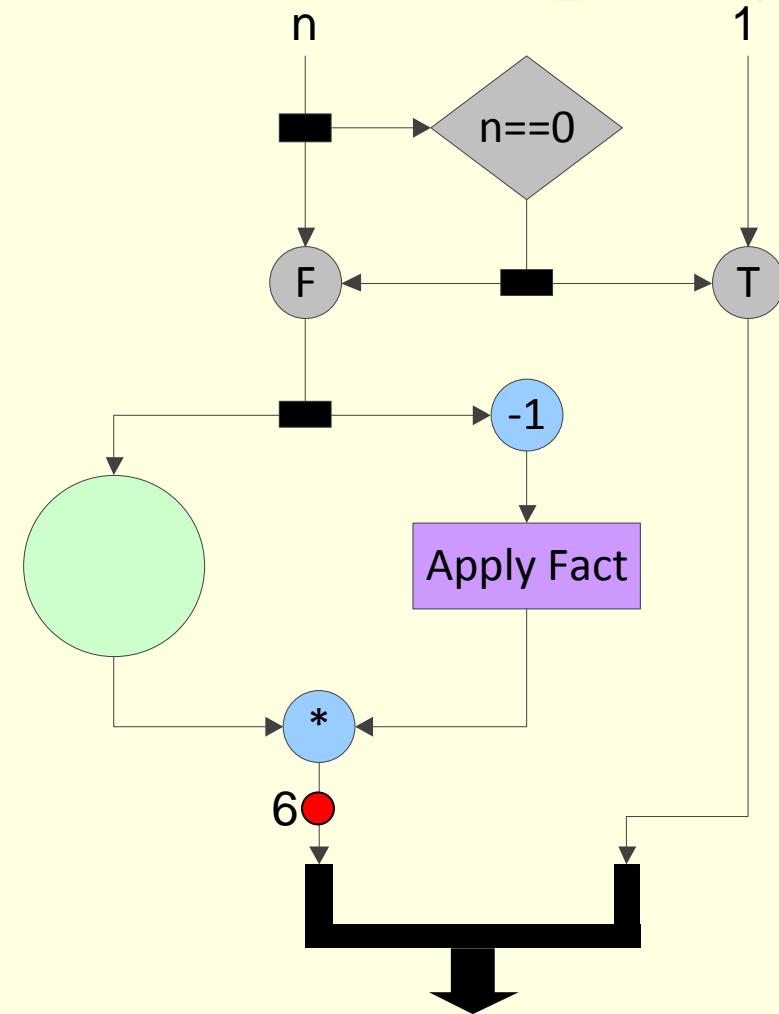


$3 * 2$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow

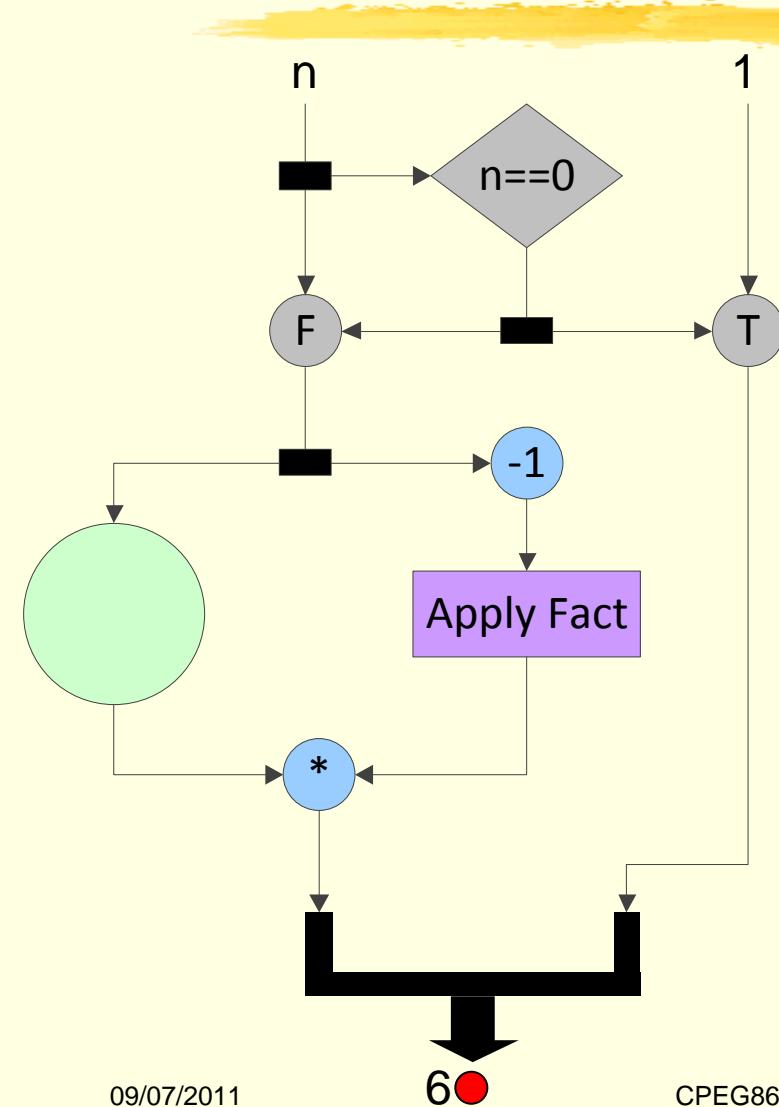


$3 * 2$

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```

# Factorial

## The Normal Version – Dynamic Dataflow



6

```
long fact(n){  
    if(n == 0) return 1;  
    else return n * fact(n-1);  
}
```