

5.WRITE A PROGRAM TO FIND FACTORIAL USING RECURSION.

PROGRAM:

```
def fact(n):
```

```
    if n==0 or n==1:
```

```
        return n
```

```
    else:
```

```
        return n*fact(n-1)
```

```
n=5
```

```
res=fact(n)
```

```
print(res)
```

TIME COMPLEXITY: $O(n)$

INPUT :5

OUTPUT:

PROBLEMS OUTPUT DEBUG CONSOLE PORTS TERMINAL

```
PS C:\Users\surya\Desktop\fruit> & C:/Users/surya/AppData/Local/Programs/Python/Python312/p  
120
```

```
PS C:\Users\surya\Desktop\fruit>
```