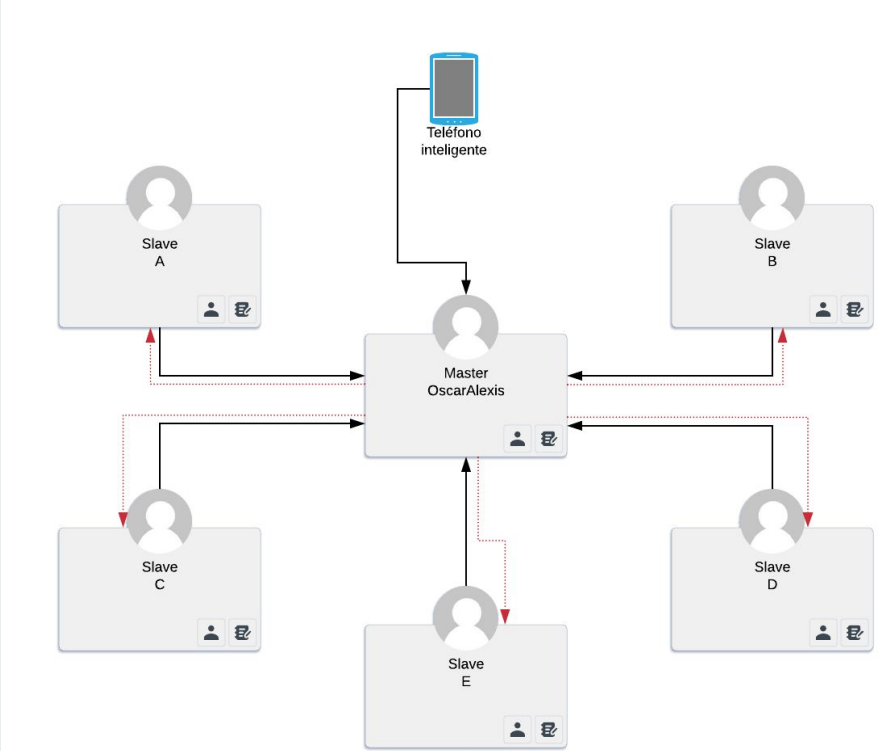
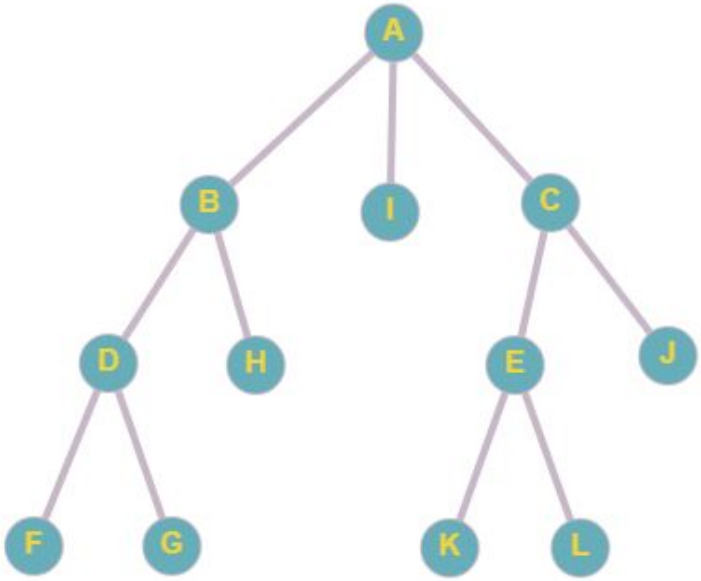
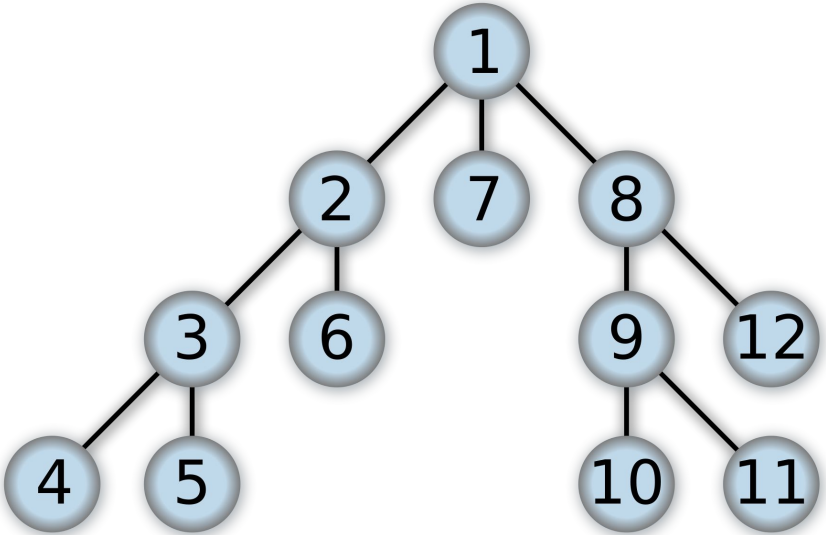
# Casos de Prueba



# 1.- Pseudo-Tree (DFS algorithm)



# Comandos de Creación y Linkeo

```
CREATE("A", "size: 42kb, files : 3")
CREATE("B", "size: 35kb, files : 2")
CREATE("C", "size: 70kb, files : 2")
CREATE("D", "size: 79kb, files : 2")
CREATE("E", "size: 63kb, files : 2")
CREATE("file.F", "size: 42kb")
CREATE("file.G", "size: 35kb")
CREATE("file.H", "size: 70kb")
CREATE("file.I", "size: 79kb")
CREATE("file.J", "size: 63kb")
CREATE("file.K", "size: 63kb")
CREATE("file.L", "size: 63kb")
LINK ("A")--("B")
LINK ("A")--("C")
LINK ("B")--("D")
LINK ("C")--("E")
LINK ("D")--("file.F")
LINK ("D")--("file.G")
LINK ("B")--("file.H")
LINK ("A")--("file.I")
LINK ("E")--("file.K")
LINK ("E")--("file.L")
LINK ("C")--("file.J")
```

# Prueba de comandos: Delete - Unlink - Update - Select y Explore

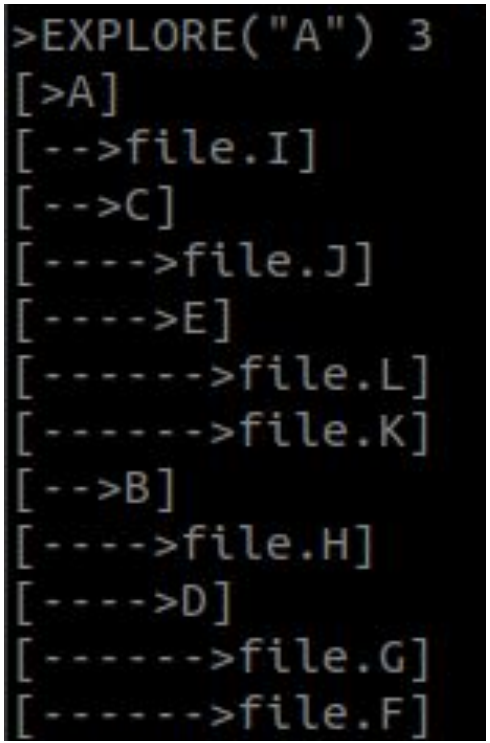
Iniciamos probando que se hicieron bien los linkeos:

```
>EXPLORE ("A") 3
```

Lo que nos debería retornar:

```
A
-->file.I
-->C
---->file.J
---->E
------>file.K
------>file.L
-->B
---->file.H
---->D
------>file.G
------>file.F
```

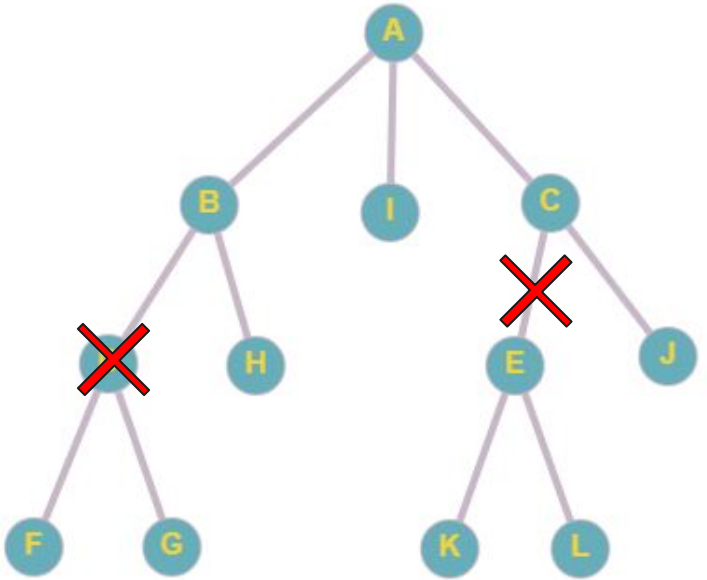
Lo que nos retorna:



Probaremos ahora con borrar un nodo con más de 2 conexiones, y a borrar un link entre 2 nodos con 1 nodo de los 2 con por lo menos 2 conexiones:

```
>DELETE ("D")

>UNLINK ("C")--("E")
```

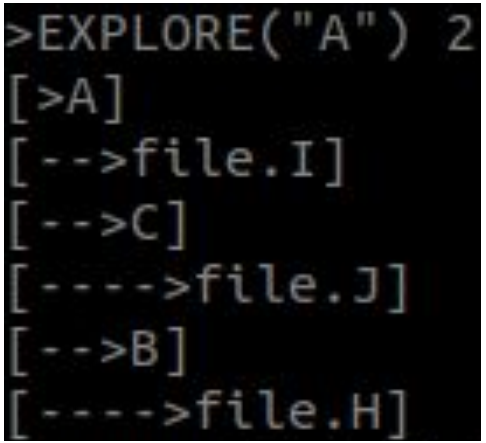


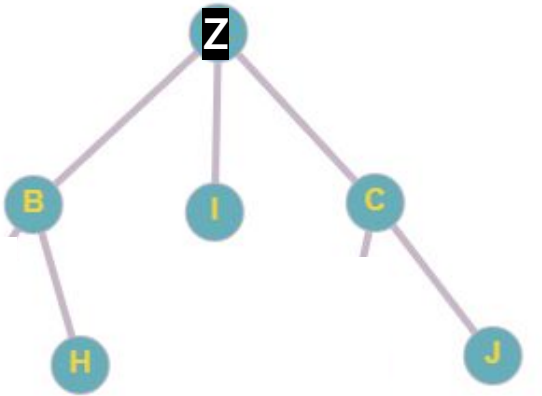
Lo que volviendo a hacer un EXPLORE como al inicio nos debería retornar :

```
>EXPLORE ("A") 2

A
-->B
---->file.H
-->file.I
-->C
---->file.J
```

Y nos retorna:






Ahora solo probaremos los comandos UPDATE y SELECT:

```
>UPDATE ("A", "Z")

>SELECT ("Z") 2
```

Lo que nos debería retornar:

```
Z                (size: 42kb, files : 3)
-->B             (size: 35kb, files : 2)
---->file.H      (size: 70kb)
-->file.I        (size: 79kb)
-->C             (size: 70kb, files : 2)
---->file.J      (size: 63kb)
```

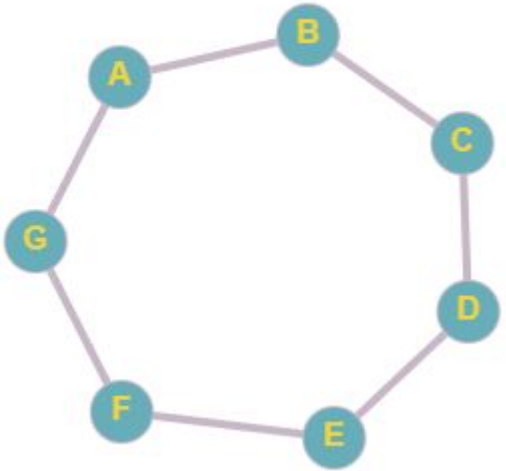
Lo que nos retorna:

```
>UPDATE("A", "Z")
[THE NODE WAS UPDATED!]
>SELECT("Z") 2
[>Z      (size: 42kb, files : 3)]
[-->C    (size: 70kb, files : 2)]
[---->file.J     (size: 63kb)]
[-->B    (size: 35kb, files : 2)]
[---->file.H     (size: 70kb)]
[-->file.I       (size: 79kb)]
```

# Lista de comandos completos de estas pruebas

- CREATE("A", "size: 42kb, files : 3")
- CREATE("B", "size: 35kb, files : 2")
- CREATE("C", "size: 70kb, files : 2")
- CREATE("D", "size: 79kb, files : 2")
- CREATE("E", "size: 63kb, files : 2")
- CREATE("file.F", "size: 42kb")
- CREATE("file.G", "size: 35kb")
- CREATE("file.H", "size: 70kb")
- CREATE("file.I", "size: 79kb")
- CREATE("file.J", "size: 63kb")
- CREATE("file.K", "size: 63kb")
- CREATE("file.L", "size: 63kb")
- LINK ("A")--("B")
- LINK ("A")--("C")
- LINK ("B")--("D")
- LINK ("C")--("E")
- LINK ("D")--("file.F")
- LINK ("D")--("file.G")
- LINK ("B")--("file.H")
- LINK ("A")--("file.I")
- LINK ("E")--("file.K")
- LINK ("E")--("file.L")
- LINK ("C")--("file.J")
- EXPLORE ("A") 3
- DELETE ("D")
- UNLINK ("C")--("E")
- EXPLORE ("A") 2
- UPDATE ("A", "Z")
- SELECT ("Z") 2

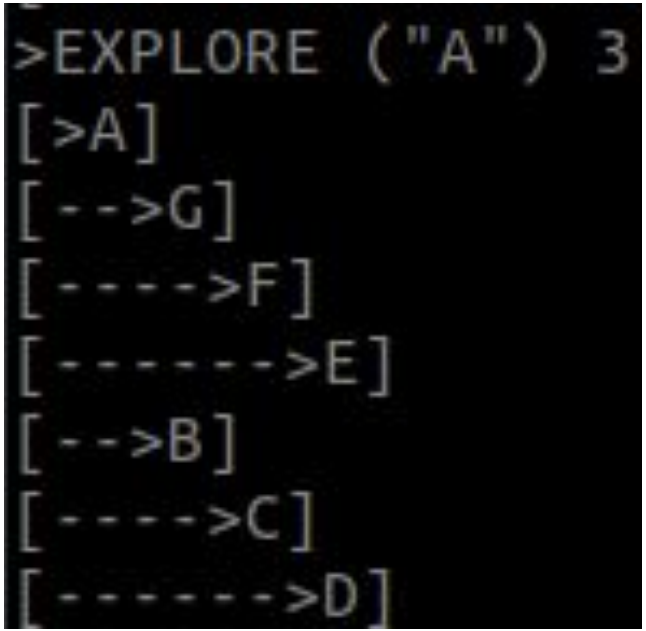
# 2.- Grafo Circular

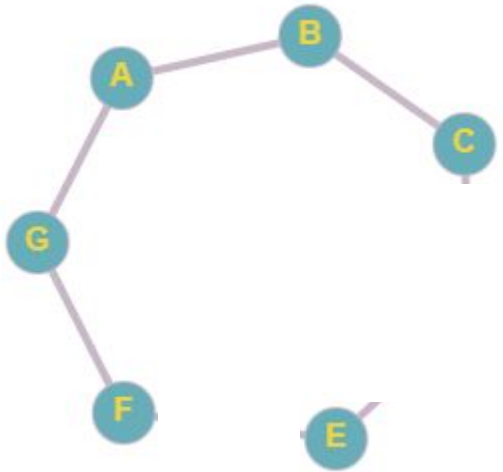


# Lista de comandos para esta prueba:

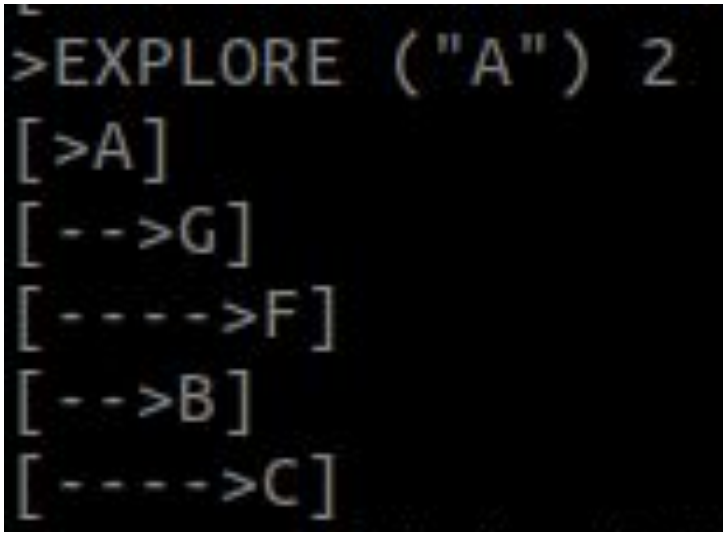
- CREATE("A", "size: 42, files : 68")
- CREATE("B", "size: 35, files : 1")
- CREATE("C", "size: 70, files : 25")
- CREATE("D", "size: 79, files : 59")
- CREATE("E", "size: 63, files : 65")
- CREATE("F", "size: 6, files : 46")
- CREATE("G", "size: 82, files : 28")
- LINK ("A")--("B")
- LINK ("B")--("C")
- LINK ("C")--("D")
- LINK ("D")--("E")
- LINK ("E")--("F")
- LINK ("F")--("G")
- LINK ("G")--("A")
- EXPLORE ("A") 3
- DELETE ("D")
- UNLINK ("E")--("F")
- EXPLORE ("A") 2
- UPDATE ("A", "Z")
- SELECT ("Z") 2

# Resultado del primer EXPLORE

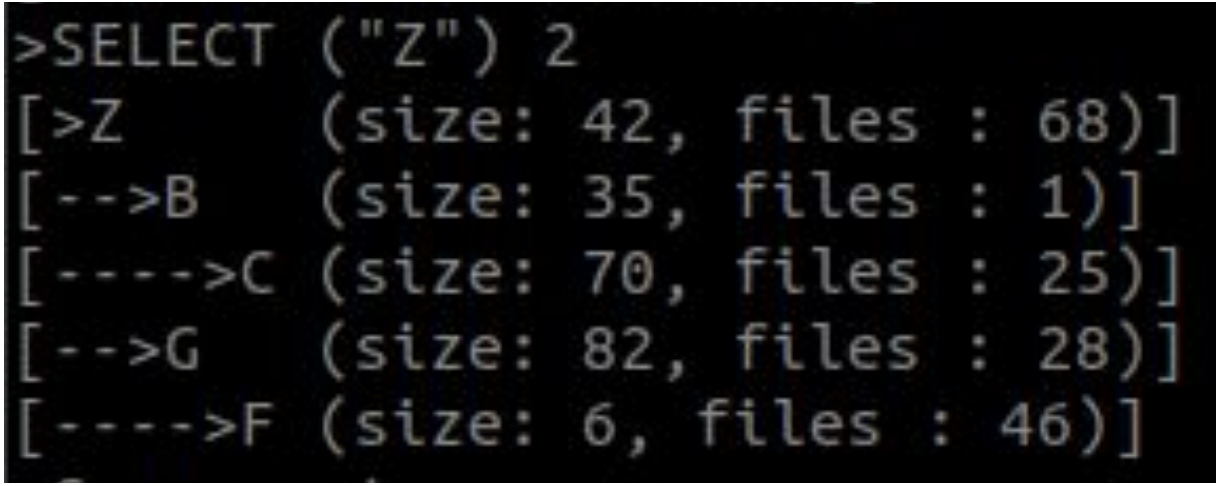



B
A
C
G
F
E

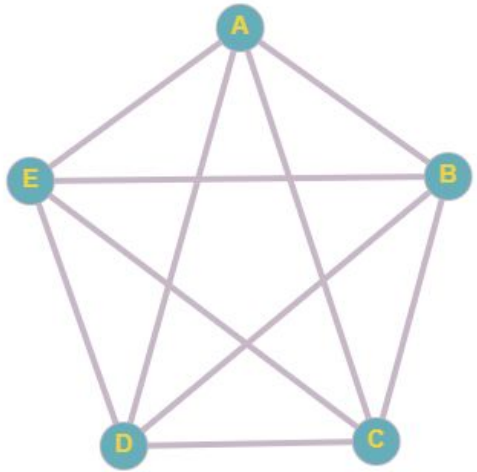
# Resultado del segundo EXPLORE después de los comandos DELETE y UNLINK



# Resultado del SELECT luego del comando UPDATE



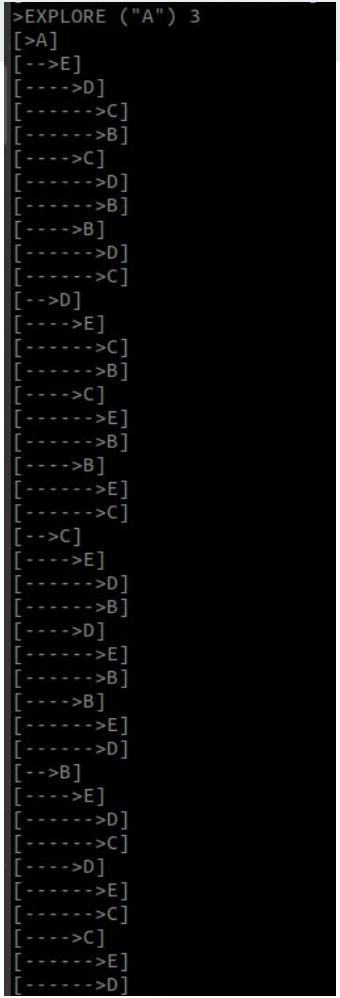
# 3.- Grafo Completo (K5)

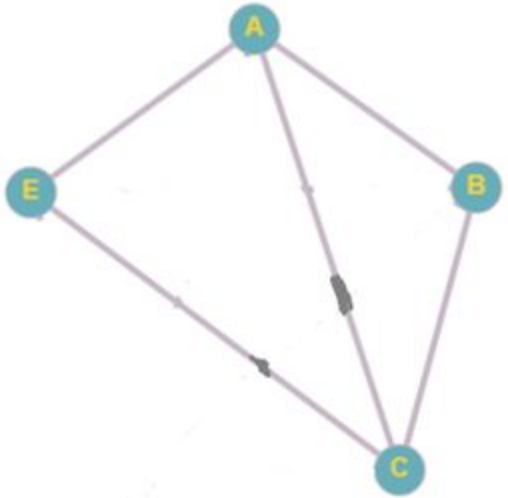


# Lista de comandos para esta prueba:

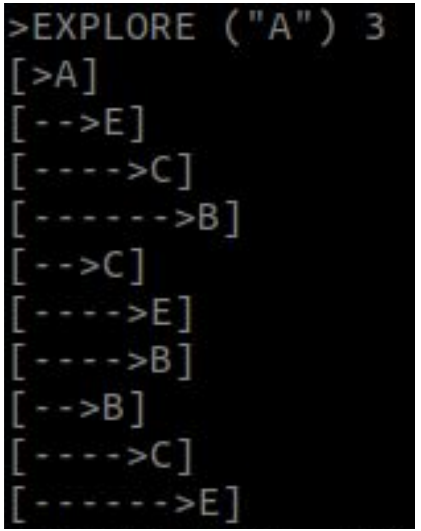
```
CREATE("A", "size: 42, files : 68")
CREATE("B", "size: 35, files : 1")
CREATE("C", "size: 70, files : 25")
CREATE("D", "size: 79, files : 59")
CREATE("E", "size: 63, files : 65")
LINK ("A")--("B")
LINK ("A")--("C")
LINK ("A")--("D")
LINK ("A")--("E")
LINK ("B")--("C")
LINK ("B")--("D")
LINK ("B")--("E")
LINK ("C")--("D")
LINK ("C")--("E")
LINK ("D")--("E")
EXPLORE ("A") 3
DELETE ("D")
UNLINK ("E")--("B")
EXPLORE ("A") 3
UPDATE ("A", "Z")
SELECT ("Z") 3
```

# Resultado del primer EXPLORE




A
E
B
C

# Resultado del EXPLORE después de los comandos DELETE y UNLINK



# Resultado del SELECT luego del comando UPDATE

```
>UPDATE ("A", "Z")
[THE NODE WAS UPDATED!]
>SELECT ("Z") 3
[>Z     (size: 42, files : 68)]
[-->B   (size: 35, files : 1)]
[---->C (size: 70, files : 25)]
[------>E       (size: 63, files : 65)]
[-->E   (size: 63, files : 65)]
[---->C (size: 70, files : 25)]
[------>B       (size: 35, files : 1)]
[-->C   (size: 70, files : 25)]
[---->E (size: 63, files : 65)]
[---->B (size: 35, files : 1)]
```