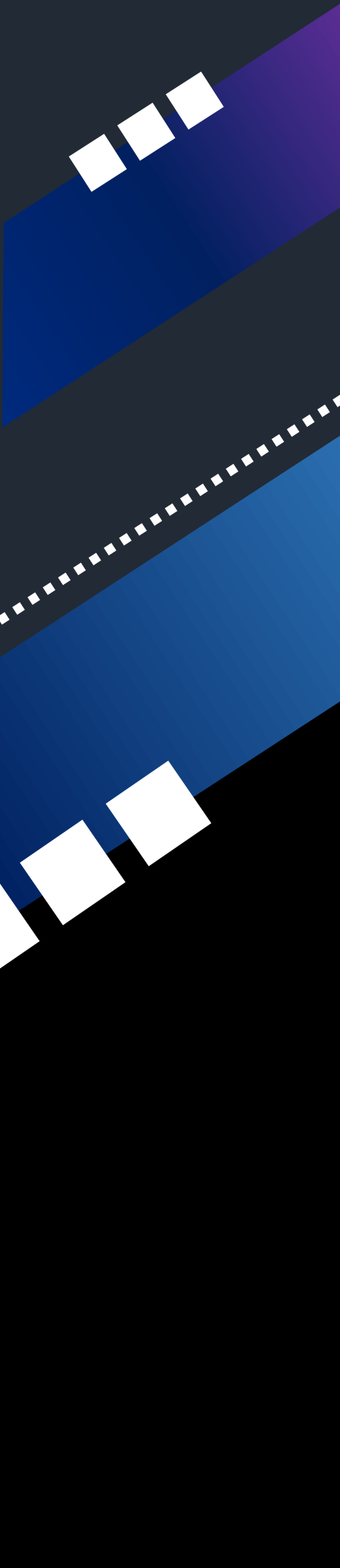


# Práctica 2:

## Lógica, Programación y Colecciones n8n



.....

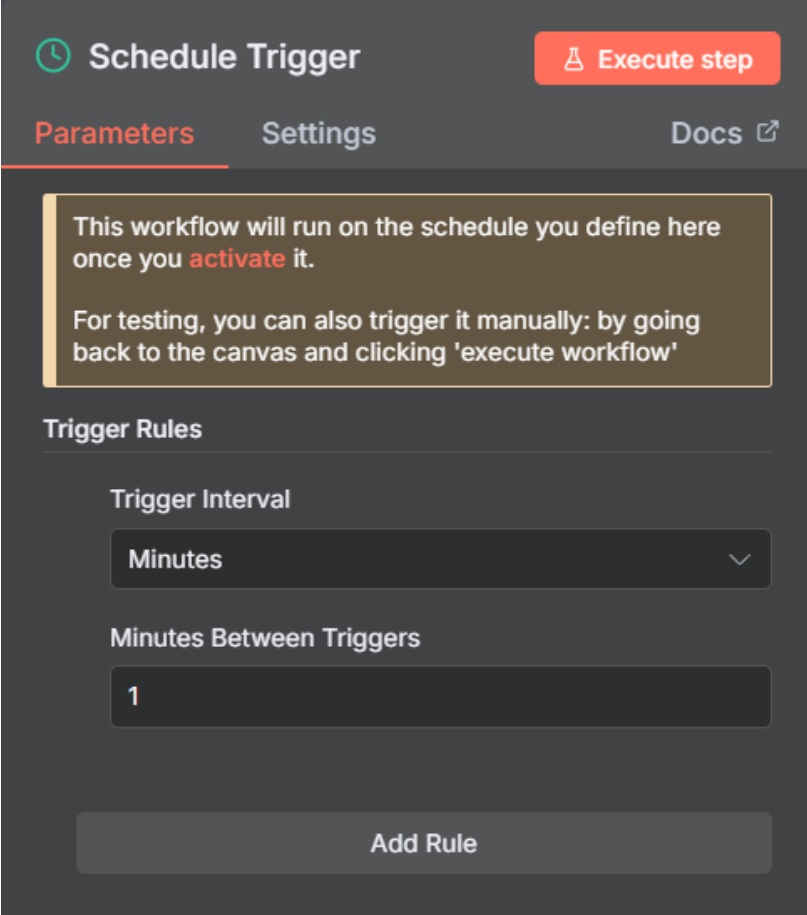
INTEGRACIÓN DE TECNOLOGÍAS Y SERVICIOS  
INFORMÁTICOS

Daniel Salas Alonso

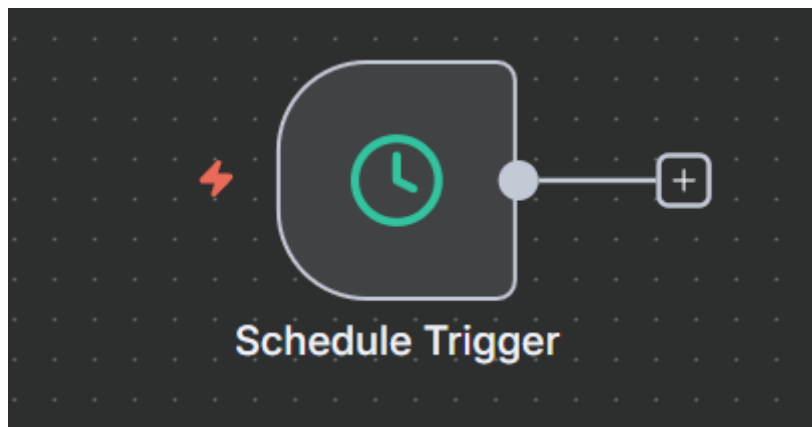
## 3. Desarrollo del Flujo de Trabajo Guiado

### 3.1. Paso 1: Configurar el Schedule Trigger

Creamos un nuevo workflow y añadimos el componente Schedule Trigger. En sus ajustes, definimos los parámetros para que este componente y los que lo siguen se ejecuten en cada minuto. Obviamos el paso de establecer Trigger at second: 0.

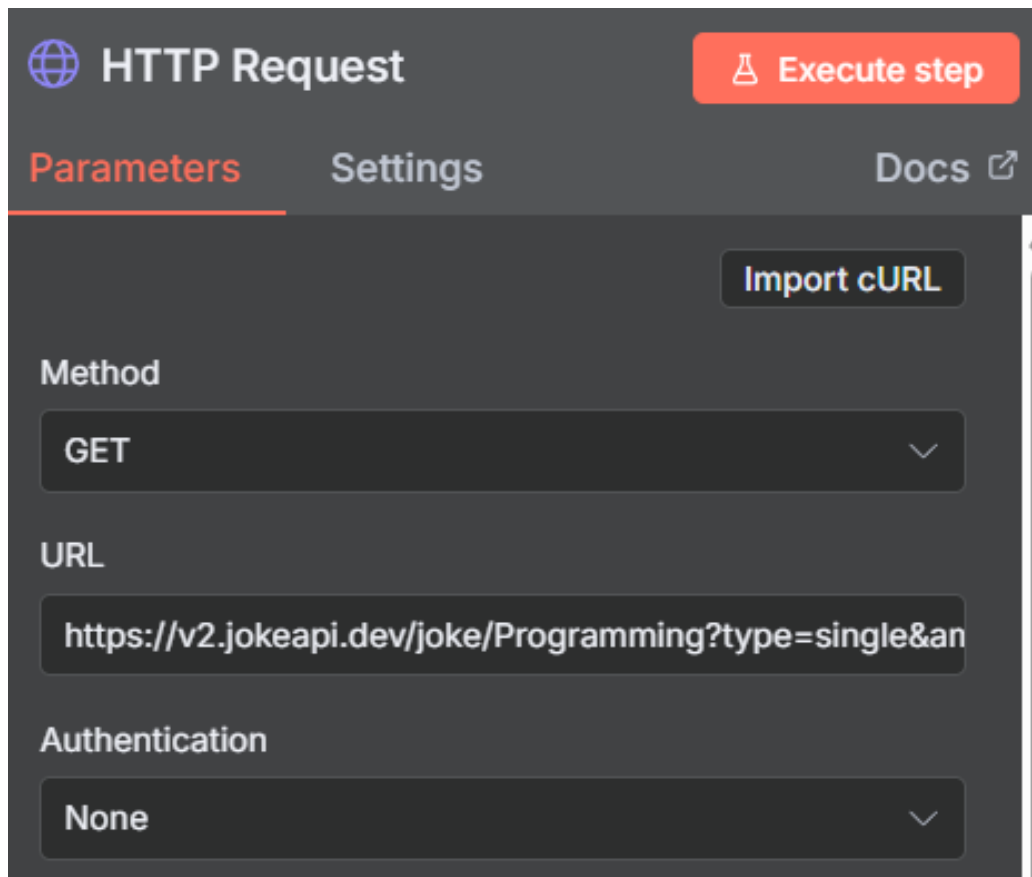


The screenshot shows the 'Schedule Trigger' configuration panel. At the top, there's a title 'Schedule Trigger' with a clock icon, a red 'Execute step' button, and tabs for 'Parameters' (selected) and 'Settings'. Below the tabs is a yellow box with instructions: 'This workflow will run on the schedule you define here once you **activate** it. For testing, you can also trigger it manually: by going back to the canvas and clicking 'execute workflow''. Under the 'Trigger Rules' section, there are two fields: 'Trigger Interval' set to 'Minutes' and 'Minutes Between Triggers' set to '1'. At the bottom is an 'Add Rule' button.

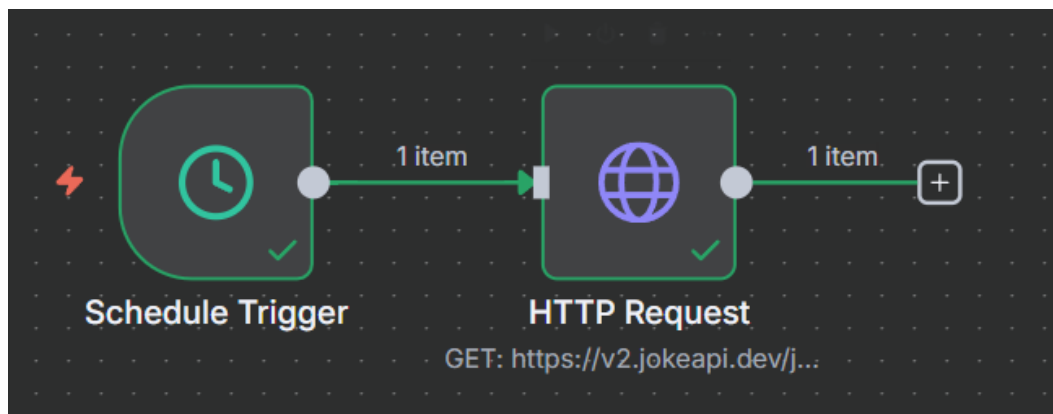


### 3.2. Paso 2: Obtener una Colección de Datos con HTTP Request

Seguido del Schedule Trigger creamos un componente HTTP Request para este acceda a la API de chistes. Establecemos la url y la configuración del componente para que nos devuelva 5 chistes sobre programación.



The screenshot shows the configuration interface for the 'HTTP Request' component. At the top, there is a title 'HTTP Request' with a globe icon, a red 'Execute step' button, and tabs for 'Parameters' (selected) and 'Settings'. Below the tabs, there is an 'Import cURL' button. The 'Parameters' section includes a 'Method' dropdown set to 'GET', a 'URL' text field containing 'https://v2.jokeapi.dev/joke/Programming?type=single&an', and an 'Authentication' dropdown set to 'None'.



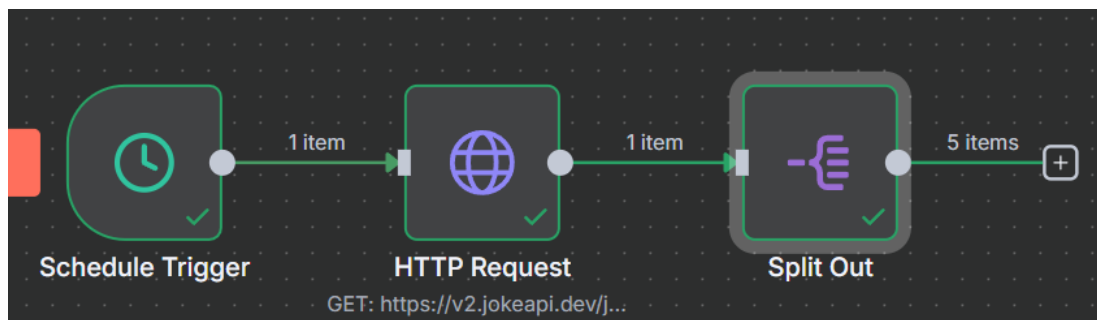
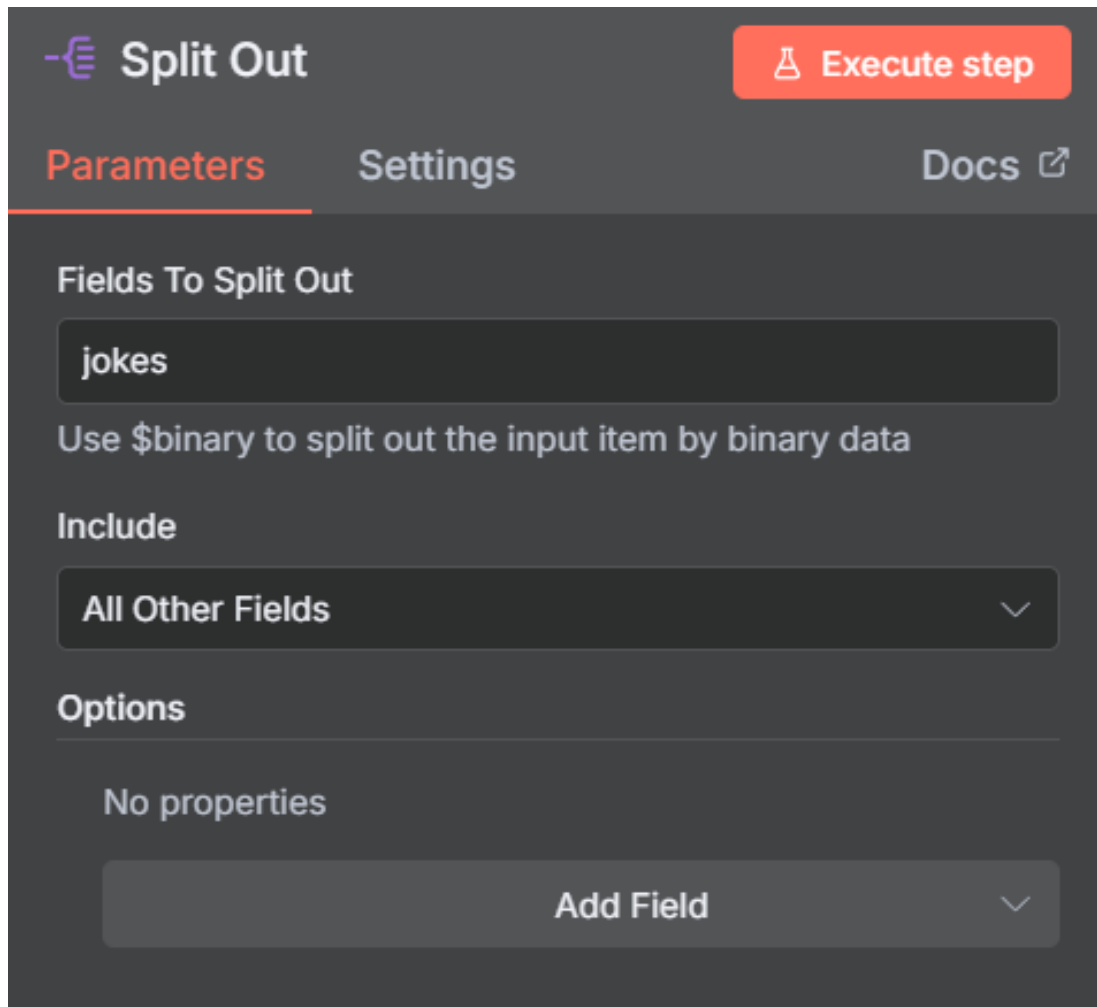
A continuación, vemos una salida en formato JSON de la ejecución del componente HTTP Request. Podemos observar que nos devuelve un único ítem que contiene 5 chistes en forma de array:

```
[
  {
    "error": false,
    "amount": 5,
    "jokes": [{
      "category": "Programming",
      "type": "single",
      "joke": "A man is smoking a cigarette and blowing smoke rings into the air. His girlfriend becomes irritated with the smoke and says \"Can't you see the warning on the cigarette pack? Smoking is hazardous to your health!\" to which the man replies, \"I am a programmer. We don't worry about warnings; we only worry about errors.\"",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": false,
        "racist": false,
        "sexist": false,
        "explicit": false
      },
      "id": 38,
      "safe": true,
      "lang": "en"
    },
    {
      "category": "Programming",
      "type": "single",
      "joke": "Your mama's so FAT she can't save files bigger than 4GB.",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": false,
        "racist": false,
        "sexist": false,
        "explicit": false
      },
      "id": 9,
      "safe": false,
      "lang": "en"
    },
    {
      "category": "Programming",
      "type": "single",
```

```
    "joke": "Today I learned that changing random stuff until your  
program works is \"hacky\" and a \"bad coding practice\" but if you do it  
fast enough it's \"Machine Learning\" and pays 4x your current salary.",  
    "flags": {  
        "nsfw": false,  
        "religious": false,  
        "political": false,  
        "racist": false,  
        "sexist": false,  
        "explicit": false  
    },  
    "id": 33,  
    "safe": true,  
    "lang": "en"  
},  
{  
    "category": "Programming",  
    "type": "single",  
    "joke": "Debugging: Removing the needles from the haystack.",  
    "flags": {  
        "nsfw": false,  
        "religious": false,  
        "political": false,  
        "racist": false,  
        "sexist": false,  
        "explicit": false  
    },  
    "id": 40,  
    "safe": true,  
    "lang": "en"  
},  
{  
    "category": "Programming",  
    "type": "single",  
    "joke": "Java and C were telling jokes. It was C's turn, so he  
writes something on the wall, points to it and says \"Do you get the  
reference?\" But Java didn't.",  
    "flags": {  
        "nsfw": false,  
        "religious": false,  
        "political": false,  
        "racist": false,  
        "sexist": false,  
        "explicit": false  
    },  
    "id": 4,  
    "safe": true,  
    "lang": "en"  
}]}}
```

### 3.3. Paso 3: Procesar la Colección con Split Out

Creamos un nuevo componente Split Out a continuación del HTTP Request. Lo configuramos de forma que, de la salida anterior, obtenga todos los chistes y nos los separe en diferentes ítems. Además, establecemos que incluya “All other fields” para que cada chiste conserve todos los subcampos pertenecientes a este.



Aquí observamos la salida de este nodo, donde podemos observar que los chistes no se encuentran en un array, en su lugar son ítems independientes:

```
[
  {
    "error": false,
    "amount": 5,
    "jokes": {
      "category": "Programming",
      "type": "single",
      "joke": "A man is smoking a cigarette and blowing smoke rings into the air. His girlfriend becomes irritated with the smoke and says \"Can't you see the warning on the cigarette pack? Smoking is hazardous to your health!\" to which the man replies, \"I am a programmer. We don't worry about warnings; we only worry about errors.\"",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": false,
        "racist": false,
        "sexist": false,
        "explicit": false
      },
      "id": 38,
      "safe": true,
      "lang": "en"
    }
  },
  {
    "error": false,
    "amount": 5,
    "jokes": {
      "category": "Programming",
      "type": "single",
      "joke": "Your mama's so FAT she can't save files bigger than 4GB.",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": false,
        "racist": false,
        "sexist": false,
        "explicit": false
      },
      "id": 9,
      "safe": false,
      "lang": "en"
    }
  }
],
{

```

```
"error": false,
"amount": 5,
"jokes": {
  "category": "Programming",
  "type": "single",
  "joke": "Today I learned that changing random stuff until your
program works is \"hacky\" and a \"bad coding practice\" but if you do it
fast enough it's \"Machine Learning\" and pays 4x your current salary.",
  "flags": {
    "nsfw": false,
    "religious": false,
    "political": false,
    "racist": false,
    "sexist": false,
    "explicit": false
  },
  "id": 33,
  "safe": true,
  "lang": "en"
}
},
{
  "error": false,
  "amount": 5,
  "jokes": {
    "category": "Programming",
    "type": "single",
    "joke": "Debugging: Removing the needles from the haystack.",
    "flags": {
      "nsfw": false,
      "religious": false,
      "political": false,
      "racist": false,
      "sexist": false,
      "explicit": false
    },
    "id": 40,
    "safe": true,
    "lang": "en"
  }
},
{
  "error": false,
  "amount": 5,
  "jokes": {
    "category": "Programming",
    "type": "single",
```



```

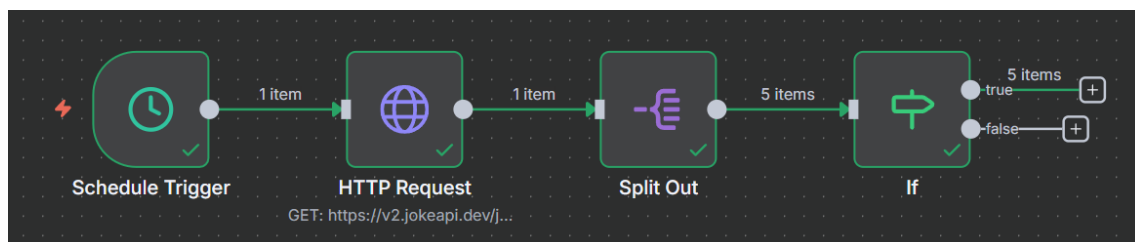
    "joke": "Java and C were telling jokes. It was C's turn, so he
writes something on the wall, points to it and says \"Do you get the
reference?\" But Java didn't.",
    "flags": {
      "nsfw": false,
      "religious": false,
      "political": false,
      "racist": false,
      "sexist": false,
      "explicit": false
    },
    "id": 4,
    "safe": true,
    "lang": "en"
  }
}
]

```

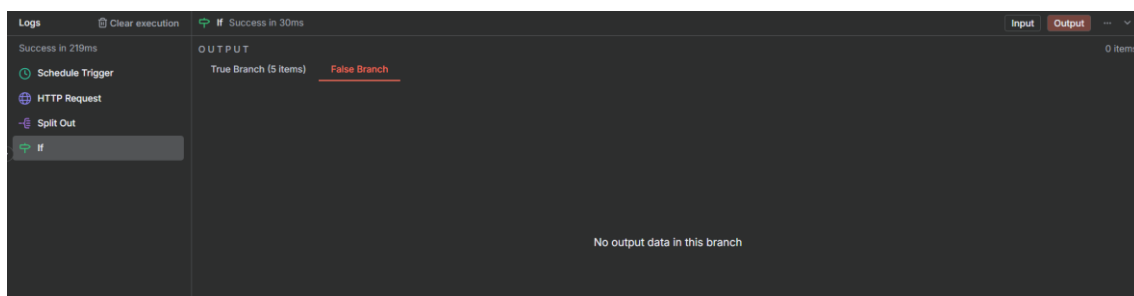
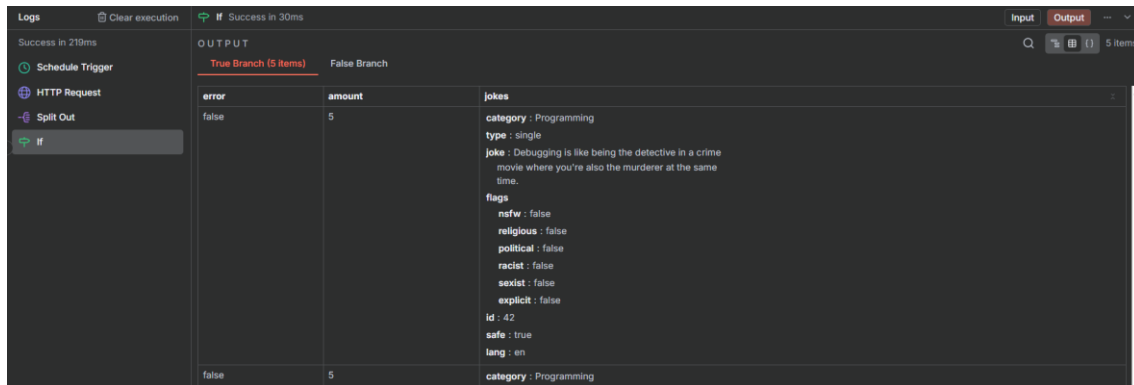
### 3.4. Paso 4: Implementar Lógica Condicional con IF

Creamos un nodo IF que recibirá como entrada la salida del Split Out. La tarea de este nodo será separar los chistes seguros de los no seguros y enviarlos a flujos diferentes. Para ello arrastramos el valor “safe” del JSON del chiste a la condición del if y establecemos que para que esta condición se cumpla debe ser true:

The screenshot shows the configuration of an 'If' node in a workflow tool. The 'INPUT' section on the left shows a 'Split Out' node with 5 items. The 'CONDITIONS' section in the center has a condition set to '{{\$json.jokes.safe}} is true'. The 'OUTPUT' section on the right shows two branches: 'True Branch (5 items)' and 'False Branch'. The 'True Branch' output shows a JSON object with 'safe: true', and the 'False Branch' output shows a JSON object with 'safe: false'.

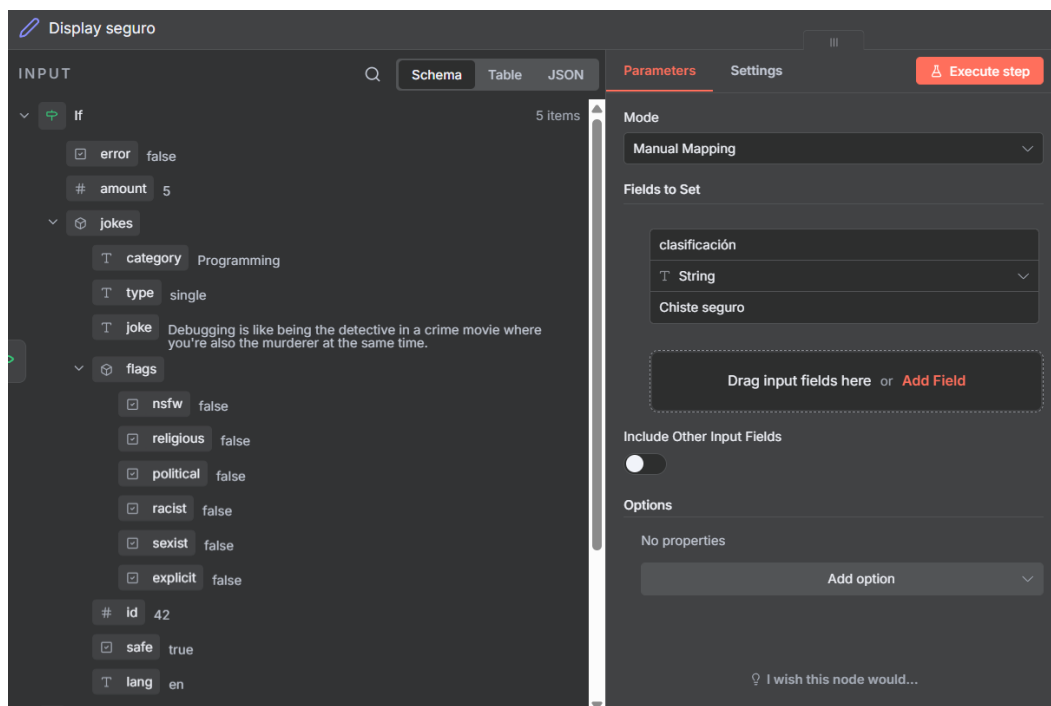


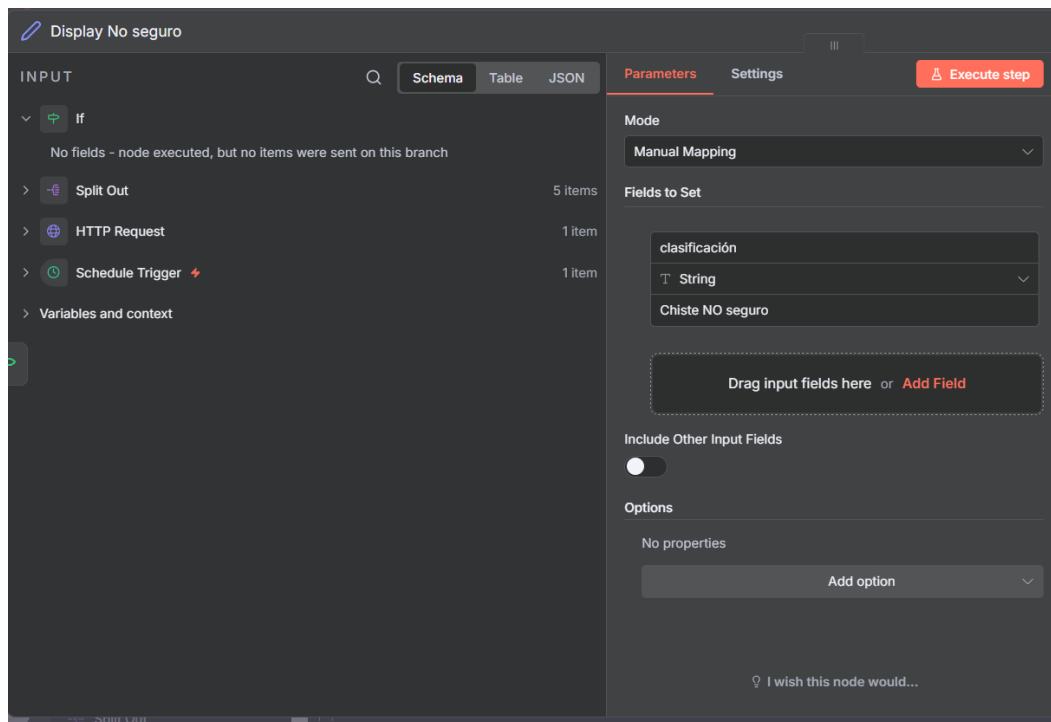
Vemos, que en el nodo IF, tenemos salidas diferentes separadas en ramas. En nuestro caso, las ramas son los chistes procesados como true y los chistes procesados como false. En este caso concreto los 5 chistes son seguros:



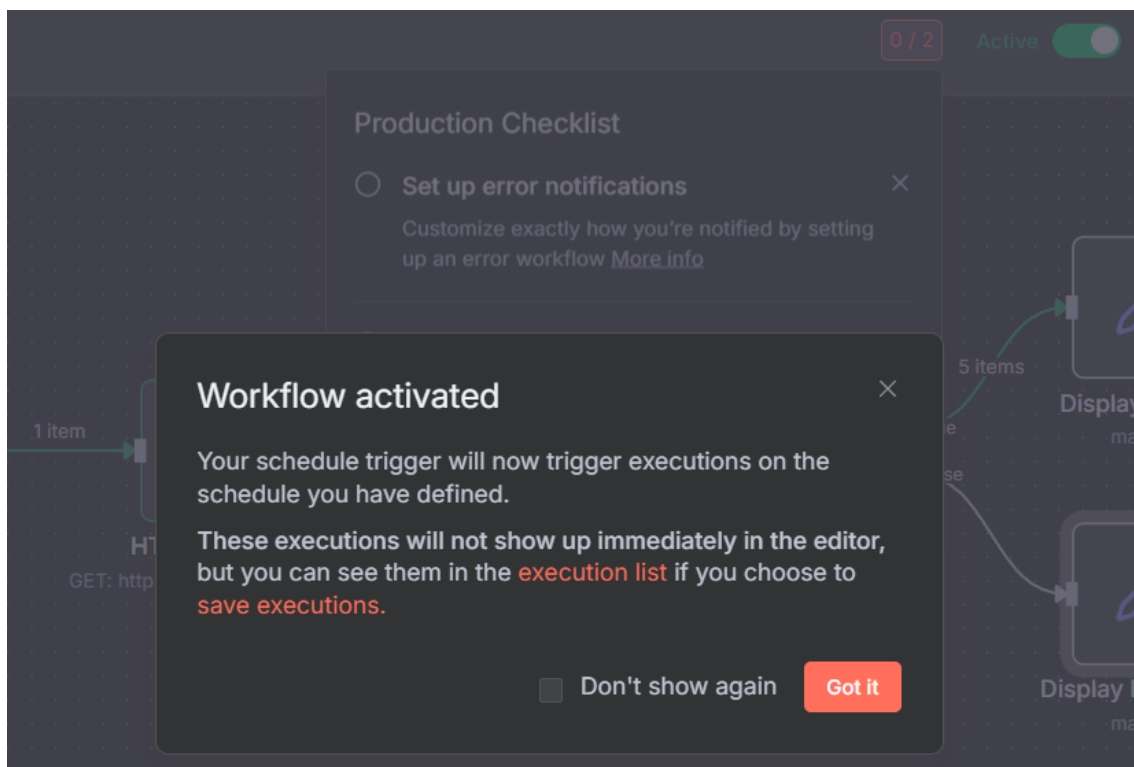
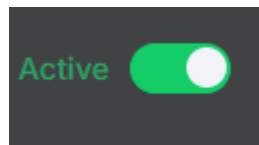
### 3.5. Paso 5: Manejar las Ramas de Ejecución

En la salida de cada rama del IF creamos un Edit Fields para mostrar de forma más limpia si se ha recibido un chiste seguro o no seguro. Los chistes seguros irán a un Edit Fields que devolverá “Chiste seguro”, mientras que los chistes inseguros irán a un Edit Fields que devolverá “Chiste NO seguro” en su clasificación.

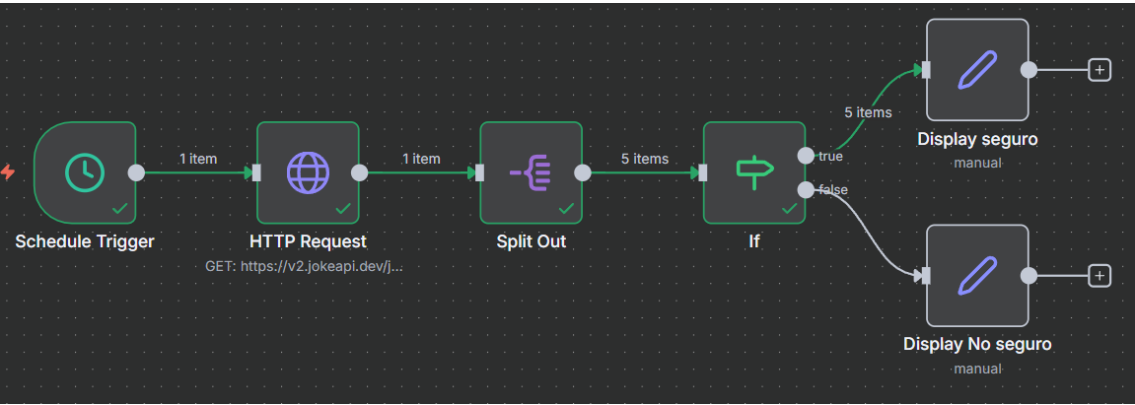




Activamos el workflow para que el Schedule Trigger empiece a funcionar, ejecutando el workflow cada minuto.



Por último, podemos ver el workflow final y el panel de ejecuciones, donde vemos que obtenemos los resultados de la API que queremos. También observamos como el IF esta filtrando nuestros resultados finales según nuestra condición y como finalmente se muestran según su seguridad.



Personal Práctica02\_Guiado + Add tag 0/2 Active Share Saved 151,750

Editor Executions Evaluations

Executions

- Auto refresh
- Oct 26, 10:49:30 Succeeded in 120ms
- Oct 26, 10:48:30 Succeeded in 163ms
- Oct 26, 10:32:46 Succeeded in 45ms
- Oct 26, 10:30:27 Succeeded in 361ms
- Oct 22, 19:15:53 Succeeded in 64ms
- Oct 22, 19:04:57 Succeeded in 272ms

Oct 26, 10:49:30 Succeeded in 120ms | ID#9

Copy to editor

The diagram illustrates a workflow on a dark background with a grid. It starts with a 'Schedule Trigger' node (clock icon) connected to an 'HTTP Request' node (globe icon) with a label '1 item'. The 'HTTP Request' node is labeled 'GET: https://v2.jokeapi.dev/j...'. It connects to a 'Split Out' node (fork icon) with a label '1 item'. The 'Split Out' node connects to an 'If' node (decision icon) with a label '5 items'. The 'If' node has two branches: 'true' leading to a 'Display seguro manual' node (notepad icon) with a label '4 items', and 'false' leading to a 'Display No seguro manual' node (notepad icon) with a label '1 item'. Both 'Display' nodes have a '+' icon next to them.

Logs

Success in 120ms

Display No seguro Success in 0s

Display seguro

Display No seguro

OUTPUT

clasificación

Chiste NO seguro

Logs

Success in 120ms

- Schedule Trigger
- HTTP Request
- Split Out
- If
- Display seguro
- Display No seguro

If Success in 1ms

INPUT OUTPUT

True Branch (4 items) False Branch (1 item)

error	amount	jokes
false	5	<pre>category : Programming type : single joke : Debugging: Removing the needles from the haystack. flags   nsfw : false   religious : false   political : false   racist : false   sexist : false   explicit : false id : 40 safe : true lang : en</pre>
false	5	<pre>category : Programming</pre>

Logs

Success in 120ms

Schedule Trigger

HTTP Request

Split Out

If

Display seguro

Display No seguro

If Success in 1ms

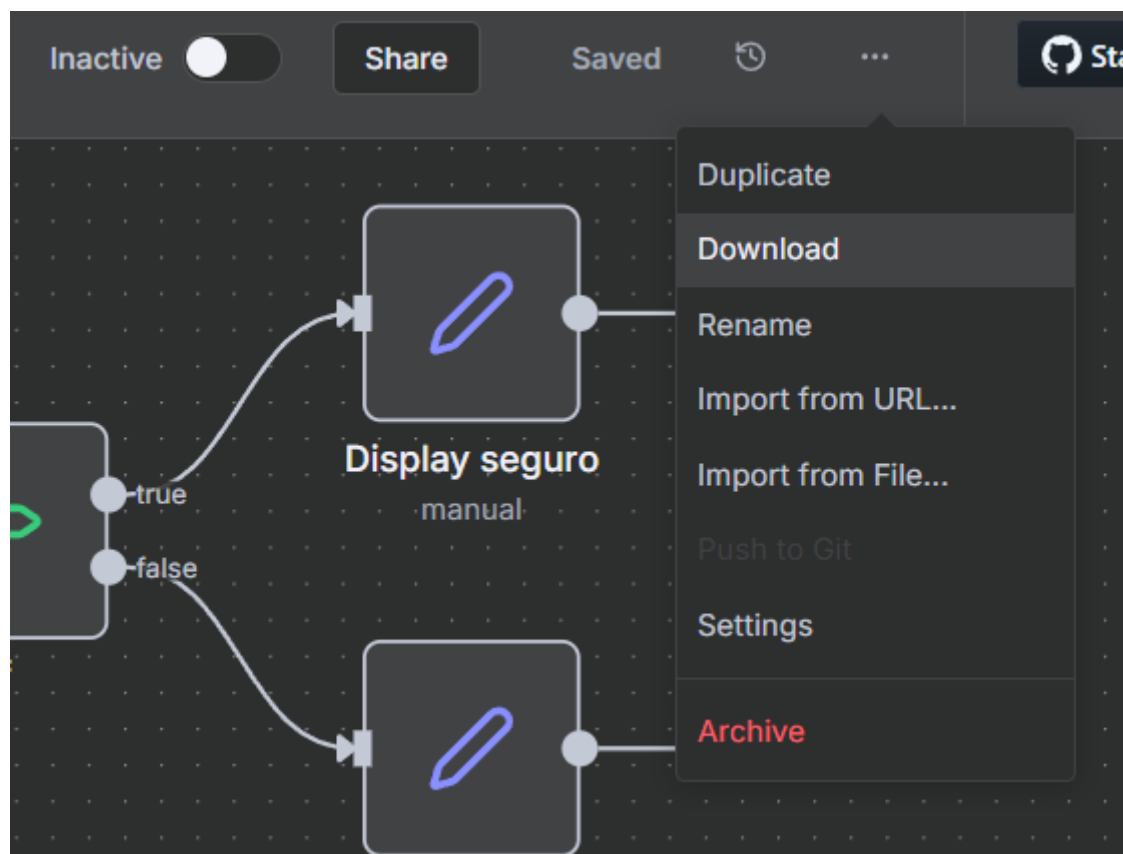
OUTPUT

True Branch (4 items)False Branch (1 item)

error	amount	jokes
false	5	<div><div>category : Programming</div><div>type : single</div><div>joke : Saying that Java is nice because it works on every OS is like saying that anal sex is nice because it works on every gender.</div><div>flags</div><div><div>nsfw : true</div><div>religious : false</div><div>political : false</div><div>racist : false</div><div>sexist : false</div><div>explicit : true</div></div><div>id : 30</div><div>safe : false</div><div>lang : en</div></div>

## 4. Ejercicios Propuestos

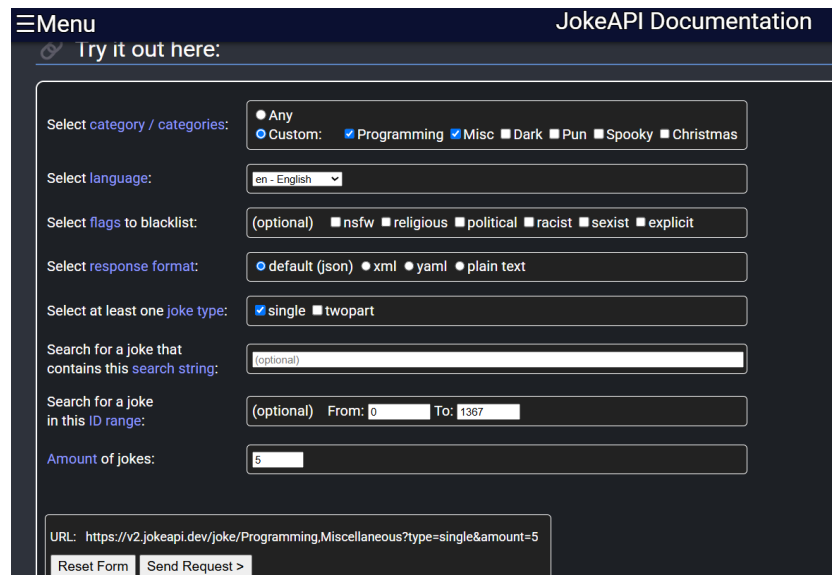
Para exportar un workflow a un archivo JSON, debemos hacer clic en los 3 puntos al lado de guardar y seleccionar “Download”.



## 4.1. Ejercicio 1: Filtrado por Categoría (Dificultad: Baja)

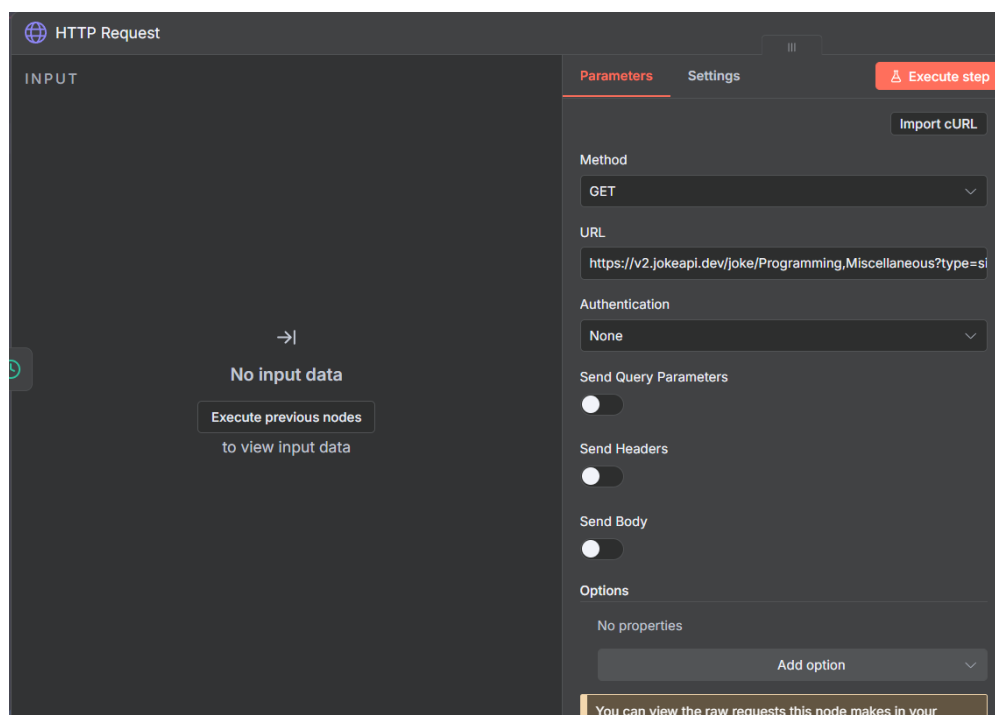
1. Modifique la URL del nodo HTTP Request para que solicite chistes de las categorías "Programming" y "Misc" simultáneamente. (Pista: la documentación de JokeAPI explica cómo solicitar de múltiples categorías).

En la documentación de la Api encontramos una sección para generar una url a partir de los filtros que queramos aplicar a los chistes. Seleccionamos una cantidad de 5 chistes de los tipos programación y misceláneo.



The screenshot shows the JokeAPI Documentation interface. It includes a 'Try it out here:' section with various filters: 'Select category / categories' (Any, Custom: Programming, Misc, Dark, Pun, Spooky, Christmas), 'Select language' (en - English), 'Select flags to blacklist' (nsfw, religious, political, racist, sexist, explicit), 'Select response format' (default (json), xml, yaml, plain text), 'Select at least one joke type' (single, twopart), 'Search for a joke that contains this search string' (optional), 'Search for a joke in this ID range' (optional, From: 0, To: 1367), and 'Amount of jokes' (5). At the bottom, the generated URL is shown: `https://v2.jokeapi.dev/joke/Programming,Miscellaneous?type=single&amount=5`. There are 'Reset Form' and 'Send Request >' buttons.

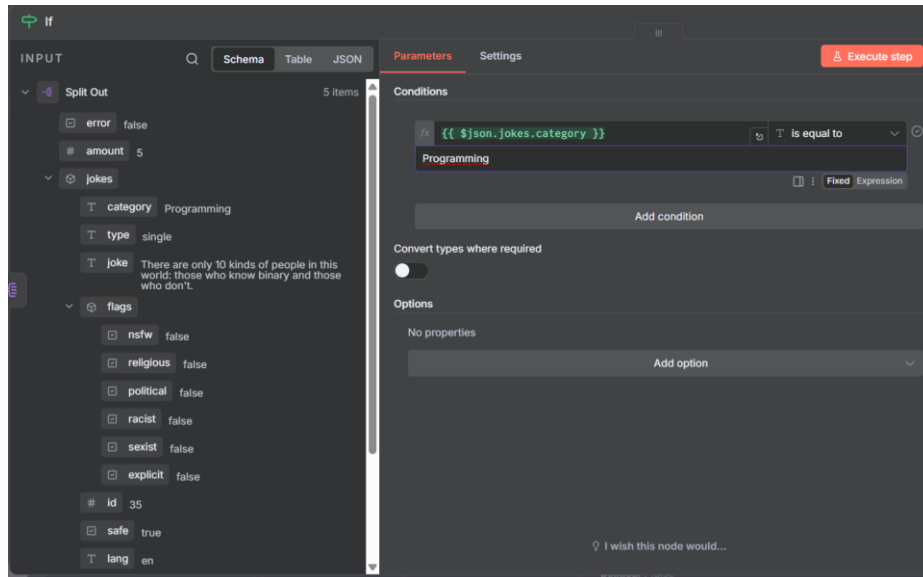
Con esta nueva url, a partir del workflow anterior, modificamos el HTTP request para que utilice esta nueva url en su lugar.



The screenshot shows the configuration of an 'HTTP Request' node in a workflow editor. The 'Parameters' tab is active, showing the following settings: 'Method' (GET), 'URL' (`https://v2.jokeapi.dev/joke/Programming,Miscellaneous?type=si`), 'Authentication' (None), 'Send Query Parameters' (toggle off), 'Send Headers' (toggle off), 'Send Body' (toggle off), and 'Options' (No properties). There is an 'Import cURL' button and an 'Execute step' button. The left panel shows 'INPUT' with 'No input data' and an 'Execute previous nodes to view input data' button. A note at the bottom states: 'You can view the raw requests this node makes in your'.

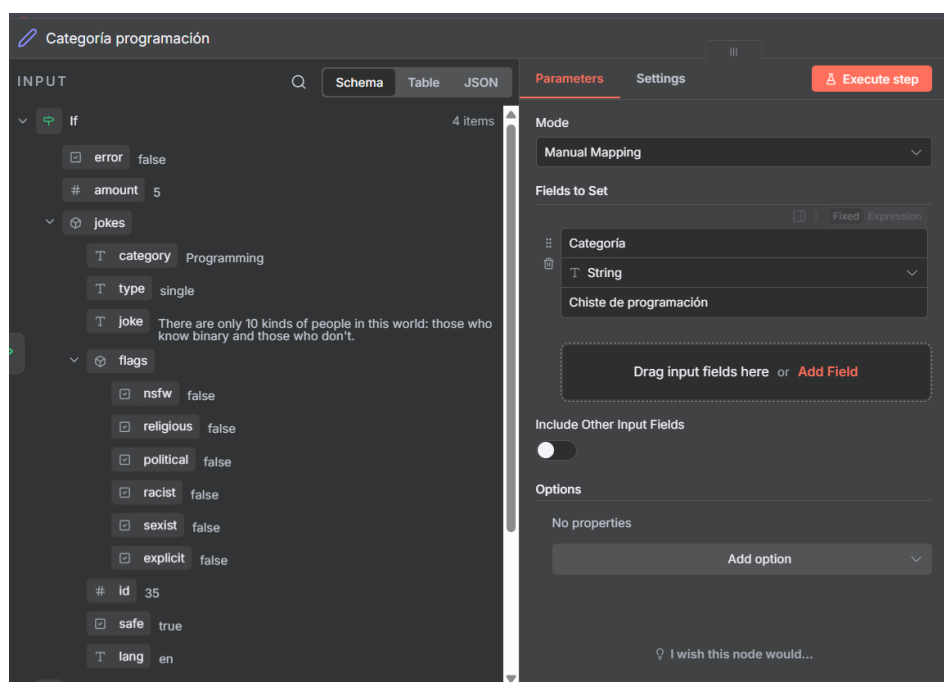
2. Ajuste el nodo IF para que compruebe si el campo *category* es igual a "Programming".

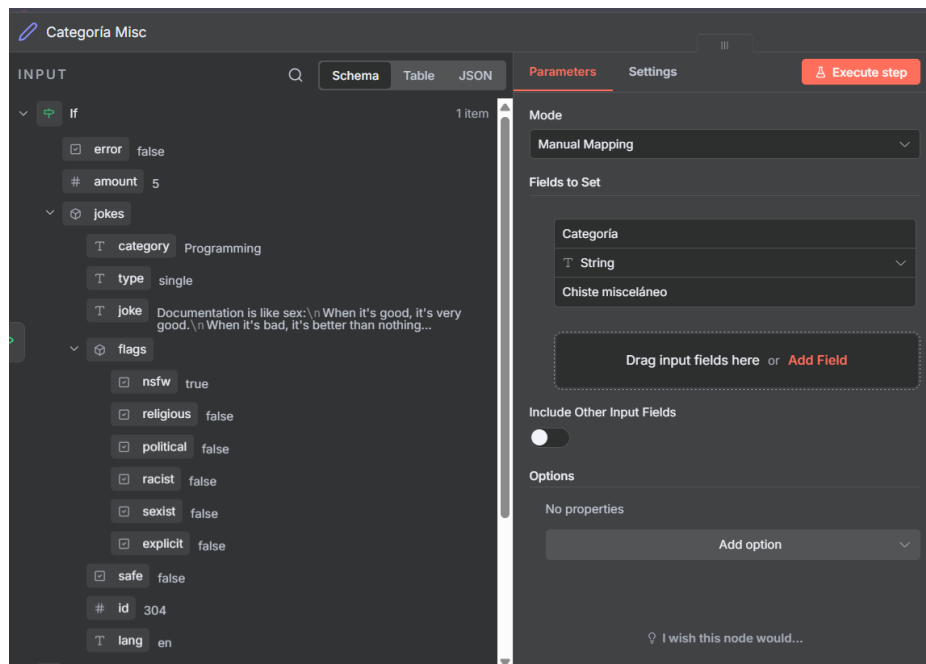
Procedemos a cambiar la condición del nodo IF para que filtre entre chistes de programación y misceláneos. Para ello, arrastramos a la condición campo JSON categoría del chiste, y si esta categoría es programación se cumple la condición, en otro caso (misceláneo) no se cumplirá.



3. Los nodos *Edit Fields (Set)* de las ramas true y false deben añadir un campo que refleje la categoría a la que pertenece cada chiste.

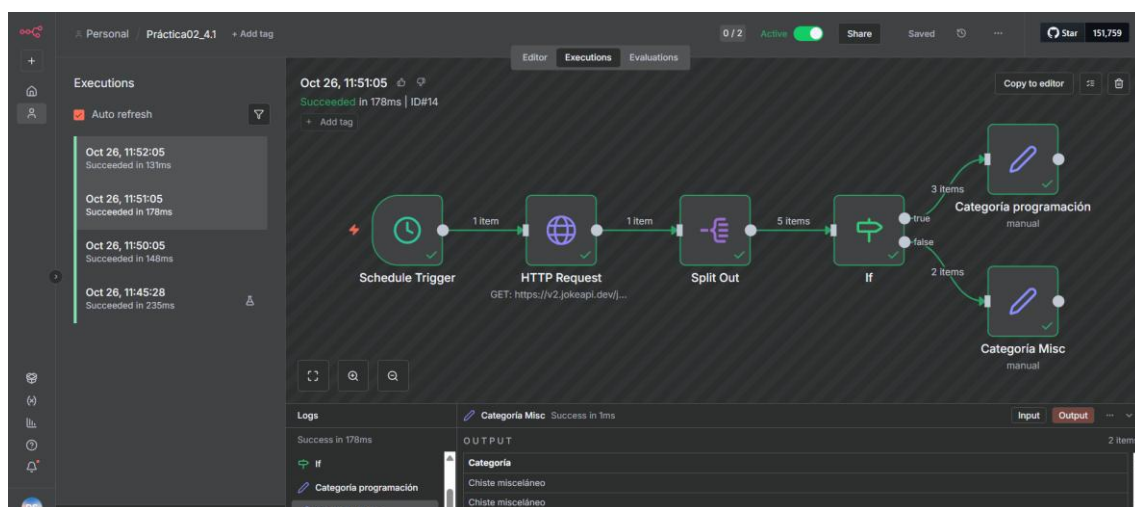
Por último, cambiamos los Edit Fileds para que en lugar de reflejar si el chiste es seguro o no, reflejen si el chiste es de categoría programación o misceláneo según las ramas del condicional anterior.



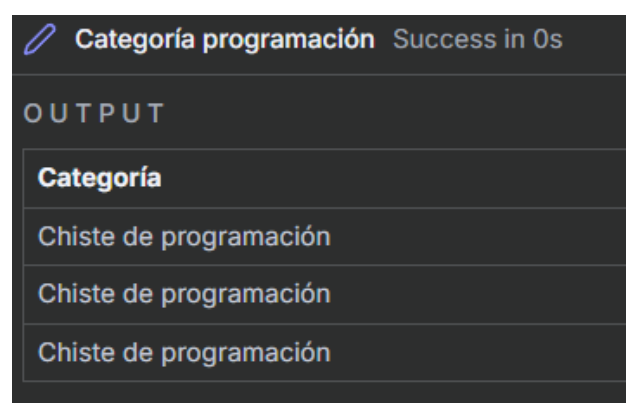


#### 4. Resultado:

Observamos el workflow final y las salidas de los últimos nodos.



Vemos las salidas de tanto el Edit Filed, como del IF para la rama de la categoría programación:





```
[
  {
    "error": false,
    "amount": 5,
    "jokes": {
      "category": "Programming",
      "type": "single",
      "joke": "Programming is 10% science, 20% ingenuity, and 70% getting
the ingenuity to work with the science.",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": false,
        "racist": false,
        "sexist": false,
        "explicit": false
      },
      "id": 37,
      "safe": true,
      "lang": "en"
    }
  },
  {
    "error": false,
    "amount": 5,
    "jokes": {
      "category": "Programming",
      "type": "single",
      "joke": "UDP is better in the COVID era since it avoids unnecessary
handshakes.",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": false,
        "racist": false,
        "sexist": false,
        "explicit": false
      },
      "id": 258,
      "safe": true,
      "lang": "en"
    }
  },
  {
    "error": false,
    "amount": 5,
    "jokes": {
      "category": "Programming",
      "type": "single",
```

```

    "joke": "Algorithm: A word used by programmers when they don't want
to explain how their code works.",
    "flags": {
      "nsfw": false,
      "religious": false,
      "political": false,
      "racist": false,
      "sexist": false,
      "explicit": false
    },
    "id": 50,
    "safe": true,
    "lang": "en"
  }
}
]

```

Vemos las salidas de tanto el Edit Filed, como del IF para la rama de la categoría misceláneo:

	<b>Categoría Misc</b>	Success in 1ms
<b>OUTPUT</b>		
<b>Categoría</b>		
Chiste misceláneo		
Chiste misceláneo		

```

[
  {
    "error": false,
    "amount": 5,
    "jokes": {
      "category": "Misc",
      "type": "single",
      "joke": "What does the MacBook have in common with Donald
Trump?\n\nI would tell you....\nBut I don't compare apples to oranges.",
      "flags": {
        "nsfw": false,
        "religious": false,
        "political": true,
        "racist": false,
        "sexist": false,
        "explicit": false
      }
    },
  },
]


```

```
    "id": 232,  
    "safe": false,  
    "lang": "en"  
  }  
},  
{  
  "error": false,  
  "amount": 5,  
  "jokes": {  
    "category": "Misc",  
    "type": "single",  
    "joke": "A neutron walks into a bar and asks for a price on a  
drink.\n\nThe barkeeper says: \"For you... no charge!\"",  
    "flags": {  
      "nsfw": false,  
      "religious": false,  
      "political": false,  
      "racist": false,  
      "sexist": false,  
      "explicit": false  
    },  
    "id": 72,  
    "safe": true,  
    "lang": "en"  
  }  
}  
]  
]
```

## 4.2. Ejercicio 2: Análisis de Productos (Dificultad: Media)


1. El flujo de trabajo debe iniciarse con un Schedule Trigger que se ejecute una vez al día.

Empezamos creando un nodo inicial Schedule Trigger en el workflow y configurando el intervalo de ejecución en uno al día. Por defecto, este se ejecutará a medianoche respecto de la hora que esté configurada en la instancia.

 Schedule Trigger

Parameters

Settings

 Execute step

This workflow will run on the schedule you define here once you **activate** it.  
For testing, you can also trigger it manually: by going back to the canvas and clicking 'execute workflow'

Trigger Rules

Trigger Interval

Days

Days Between Triggers

1


Trigger at Hour

Midnight

Trigger at Minute

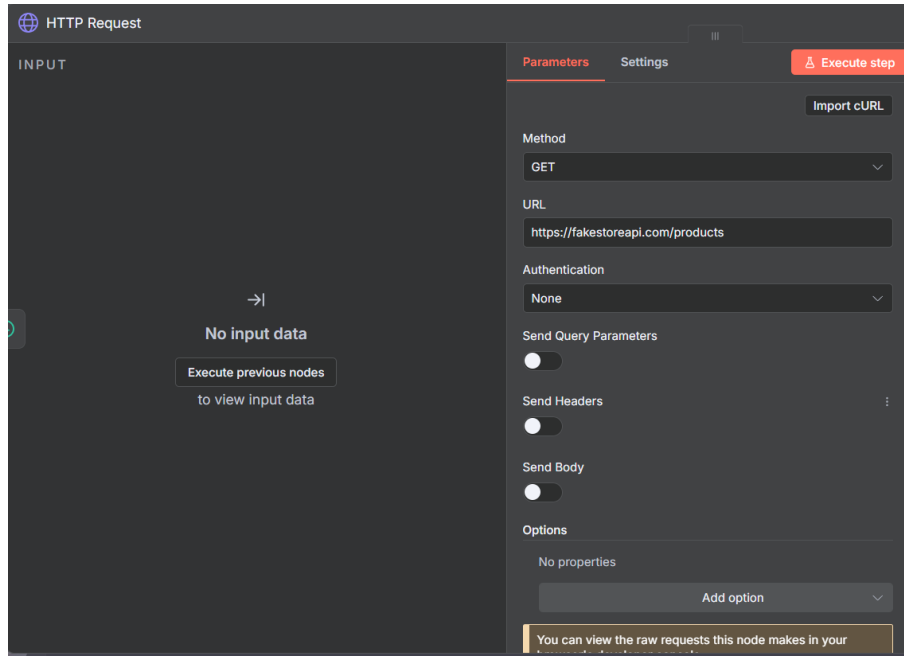
0

Add Rule

 I wish this node would...

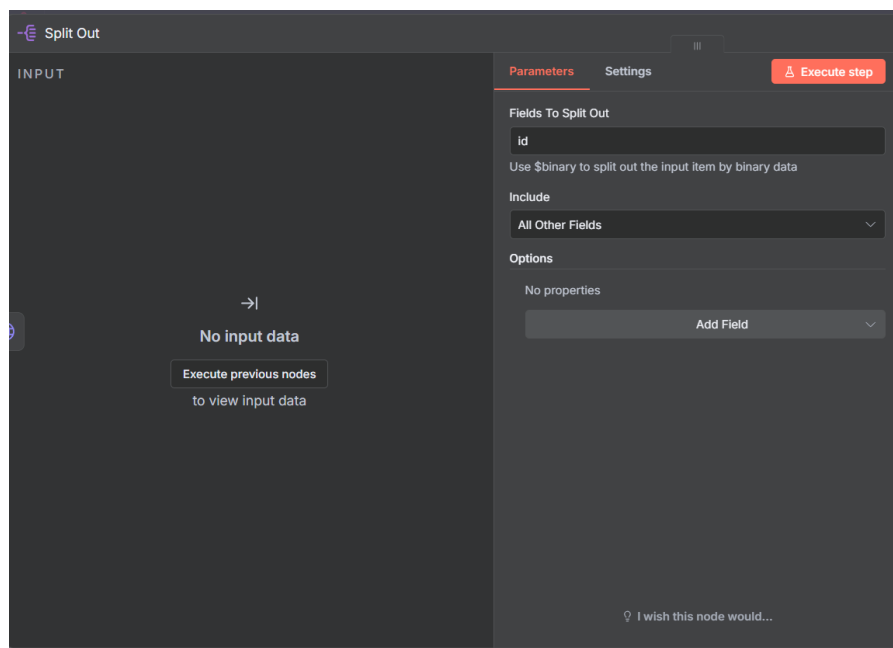
2. Debe usar un HTTP Request para obtener la lista completa de productos de la API.

A continuación del nodo inicial conectamos el componente HTTP Request. Este nodo devolverá los productos de la tienda de la API indicada por salida.



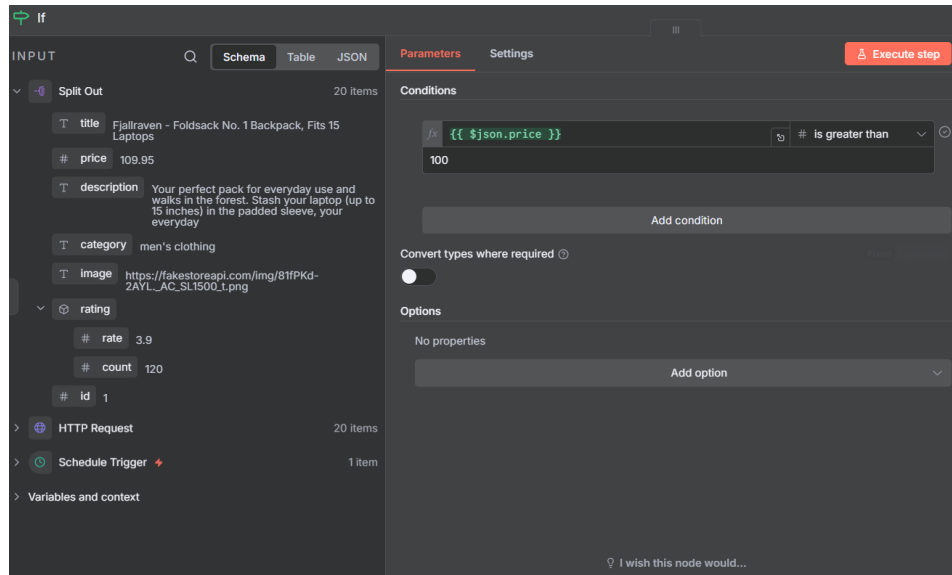
3. Utilice un Split Out para procesar cada producto individualmente.

Creamos un nuevo componente Split Out a continuación del HTTP Request. Donde separará los diferentes productos de la tienda en diferentes ítems para que puedan ser procesados individualmente. Además, establecemos que incluya “All other fields” para que cada producto conserve todos los subcampos pertenecientes a este.



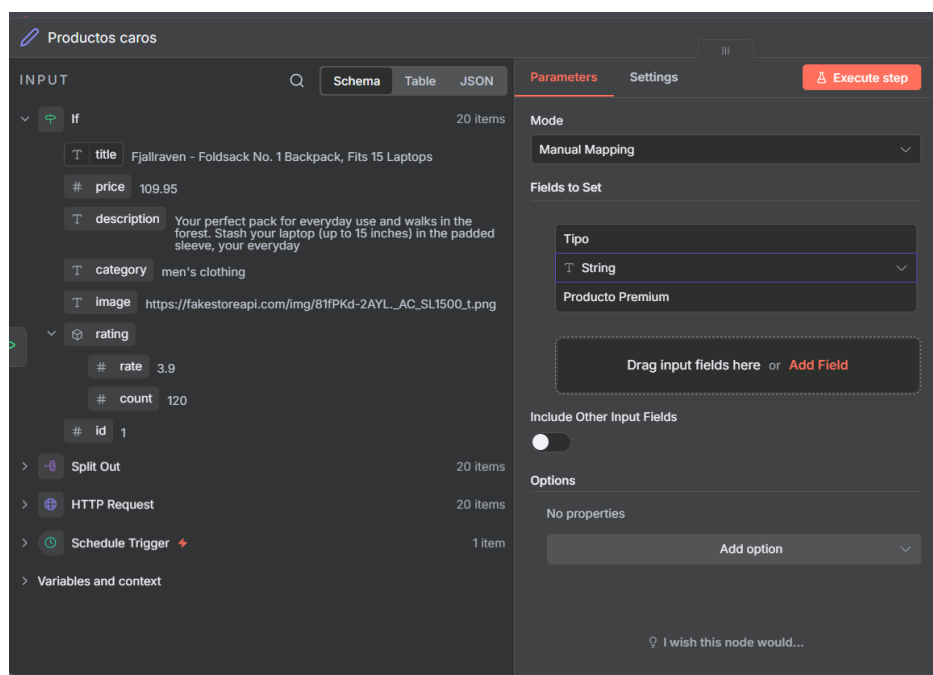
4. *Implemente un nodo IF para separar los productos en dos grupos: aquellos cuyo precio (price) es superior a 100 y aquellos cuyo precio es 100 o inferior.*

Creamos un nodo IF donde comparará si el campo precio de cada producto es mayor que 100, separando en diferentes ramas los productos que valen más de 100 y los que valen menos o igual que 100.



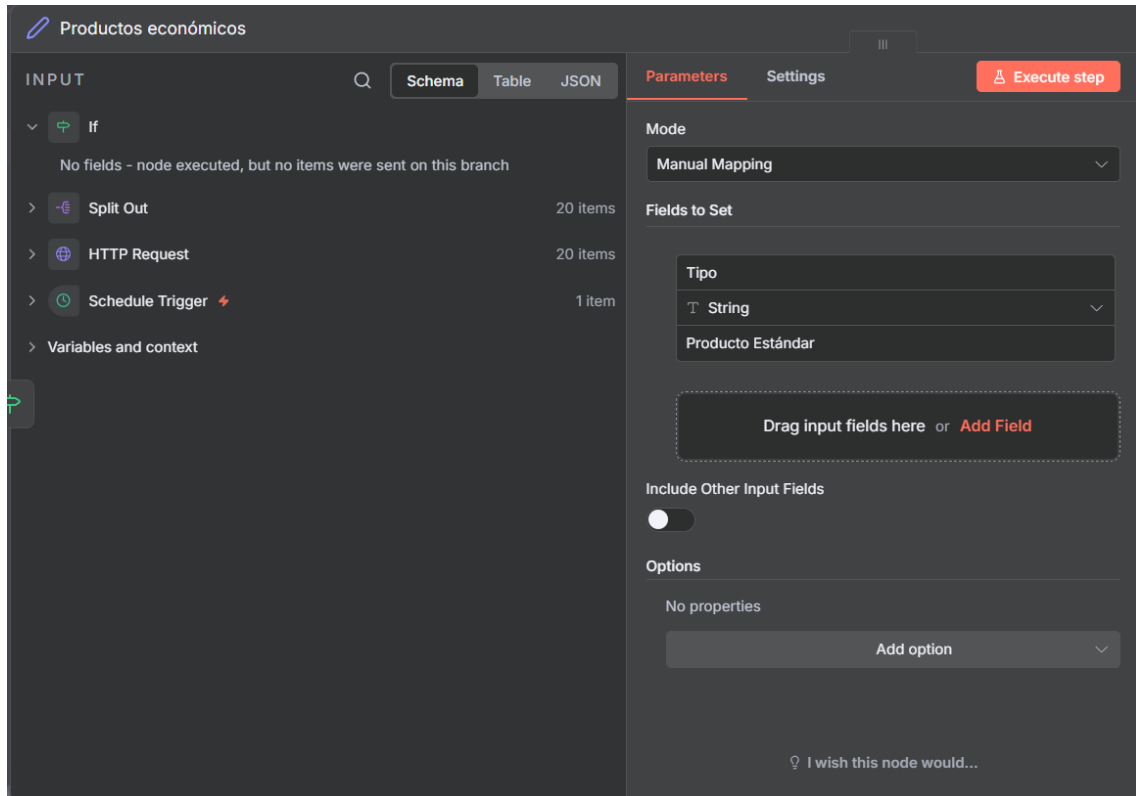
5. *Para los productos caros (rama true), añade un nodo Edit Fields (Set) que cree un campo etiqueta con el valor Producto Premium.*

En la salida de la rama true del nodo IF, creamos un Edit Fields para mostrar de forma más limpia si el producto tratado vale más de 100, categorizándolo como producto premium.



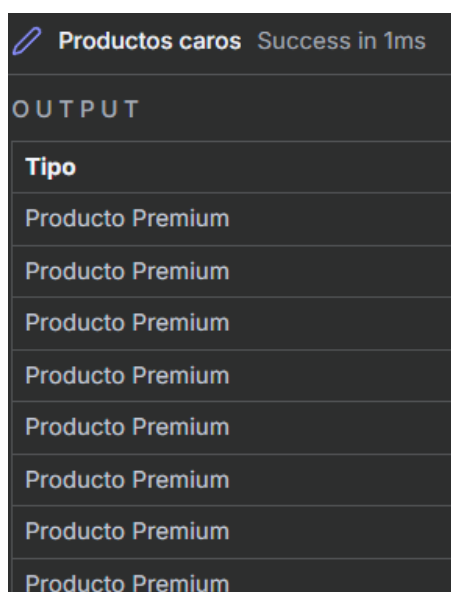
6. Para los productos económicos (rama false), el campo etiqueta debe tener el valor Producto Estándar.

En la salida de la rama false del nodo IF, creamos un Edit Fields para mostrar de forma más limpia si el producto tratado vale 100 o menos de 100, categorizándolo como producto estándar.



## 7. Resultados:

Vemos las salidas de tanto el Edit Filed, como del IF para la rama del producto premium:



```
[
  {
    "title": "Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops",
    "price": 109.95,
    "description": "Your perfect pack for everyday use and walks in the forest. Stash your laptop (up to 15 inches) in the padded sleeve, your everyday",
    "category": "men's clothing",
    "image": "https://fakestoreapi.com/img/81fPKd-2AYL._AC_SL1500_t.png",
    "rating": {
      "rate": 3.9,
      "count": 120
    },
    "id": 1
  },
  {
    "title": "John Hardy Women's Legends Naga Gold & Silver Dragon Station Chain Bracelet",
    "price": 695,
    "description": "From our Legends Collection, the Naga was inspired by the mythical water dragon that protects the ocean's pearl. Wear facing inward to be bestowed with love and abundance, or outward for protection.",
    "category": "jewelery",
    "image": "https://fakestoreapi.com/img/71pWzhdJNwL._AC_UL640_QL65_ML3_t.png",
    "rating": {
      "rate": 4.6,
      "count": 400
    },
    "id": 5
  },
  {
    "title": "Solid Gold Petite Micropave ",
    "price": 168,
    "description": "Satisfaction Guaranteed. Return or exchange any order within 30 days.Designed and sold by Hafeez Center in the United States. Satisfaction Guaranteed. Return or exchange any order within 30 days.",
    "category": "jewelery",
    "image": "https://fakestoreapi.com/img/61sbMiUnoGL._AC_UL640_QL65_ML3_t.png",
    "rating": {
      "rate": 3.9,
      "count": 70
    },
    "id": 6
  },
  {
    "title": "SanDisk SSD PLUS 1TB Internal SSD - SATA III 6 Gb/s",
```



```
    "price": 109,
    "description": "Easy upgrade for faster boot up, shutdown,
application load and response (As compared to 5400 RPM SATA 2.5” hard
drive; Based on published specifications and internal benchmarking tests
using PCMark vantage scores) Boosts burst write performance, making it
ideal for typical PC workloads The perfect balance of performance and
reliability Read/write speeds of up to 535MB/s/450MB/s (Based on internal
testing; Performance may vary depending upon drive capacity, host device,
OS and application.)",
    "category": "electronics",
    "image": "https://fakestoreapi.com/img/61U7T1koQqL._AC_SX679_t.png",
    "rating": {
        "rate": 2.9,
        "count": 470
    },
    "id": 10
},
{
    "title": "Silicon Power 256GB SSD 3D NAND A55 SLC Cache Performance
Boost SATA III 2.5",
    "price": 109,
    "description": "3D NAND flash are applied to deliver high transfer
speeds Remarkable transfer speeds that enable faster bootup and improved
overall system performance. The advanced SLC Cache Technology allows
performance boost and longer lifespan 7mm slim design suitable for
Ultrabooks and Ultra-slim notebooks. Supports TRIM command, Garbage
Collection technology, RAID, and ECC (Error Checking & Correction) to
provide the optimized performance and enhanced reliability.",
    "category": "electronics",
    "image": "https://fakestoreapi.com/img/71kWymZ+c+L._AC_SX679_t.png",
    "rating": {
        "rate": 4.8,
        "count": 319
    },
    "id": 11
},
{
    "title": "WD 4TB Gaming Drive Works with Playstation 4 Portable
External Hard Drive",
    "price": 114,
    "description": "Expand your PS4 gaming experience, Play anywhere Fast
and easy, setup Sleek design with high capacity, 3-year manufacturer's
limited warranty",
    "category": "electronics",
    "image": "https://fakestoreapi.com/img/61mtL65D4cL._AC_SX679_t.png",
    "rating": {
        "rate": 4.8,
        "count": 400
    },
    "id": 12
},
```

```
    "id": 12
  },
  {
    "title": "Acer SB220Q bi 21.5 inches Full HD (1920 x 1080) IPS Ultra-Thin",
    "price": 599,
    "description": "21. 5 inches Full HD (1920 x 1080) widescreen IPS display And Radeon free Sync technology. No compatibility for VESA Mount Refresh Rate: 75Hz - Using HDMI port Zero-frame design | ultra-thin | 4ms response time | IPS panel Aspect ratio - 16: 9. Color Supported - 16. 7 million colors. Brightness - 250 nit Tilt angle -5 degree to 15 degree. Horizontal viewing angle-178 degree. Vertical viewing angle-178 degree 75 hertz",
    "category": "electronics",
    "image": "https://fakestoreapi.com/img/81QpkIctqPL._AC_SX679_t.png",
    "rating": {
      "rate": 2.9,
      "count": 250
    },
    "id": 13
  },
  {
    "title": "Samsung 49-Inch CHG90 144Hz Curved Gaming Monitor (LC49HG90DMNXZA) – Super Ultrawide Screen QLED ",
    "price": 999.99,
    "description": "49 INCH SUPER ULTRAWIDE 32:9 CURVED GAMING MONITOR with dual 27 inch screen side by side QUANTUM DOT (QLED) TECHNOLOGY, HDR support and factory calibration provides stunningly realistic and accurate color and contrast 144HZ HIGH REFRESH RATE and 1ms ultra fast response time work to eliminate motion blur, ghosting, and reduce input lag",
    "category": "electronics",
    "image": "https://fakestoreapi.com/img/81Zt42ioCgL._AC_SX679_t.png",
    "rating": {
      "rate": 2.2,
      "count": 140
    },
    "id": 14
  }
]
```

Vemos las salidas de tanto el Edit Filed, como del IF para la rama del producto estándar:

Logs	Productos económicos
Success in 324ms	OUTPUT
Schedule Trigger	Tipo
HTTP Request	Producto Estándar
Split Out	Producto Estándar
If	Producto Estándar
Productos caros	Producto Estándar
Productos económicos	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar
	Producto Estándar

```
[
  {
    "title": "Mens Casual Premium Slim Fit T-Shirts ",
    "price": 22.3,
    "description": "Slim-fitting style, contrast raglan long sleeve, three-button henley placket, light weight & soft fabric for breathable and comfortable wearing. And Solid stitched shirts with round neck made for durability and a great fit for casual fashion wear and diehard baseball fans. The Henley style round neckline includes a three-button placket.",
    "category": "men's clothing",
    "image": "https://fakestoreapi.com/img/71-3HjGNDUL._AC_SY879._SX._UX._SY._UY_t.png",
    "rating": {
      "rate": 4.1,
      "count": 259
    },
    "id": 2
  },
]
```

```
{
  "title": "Mens Cotton Jacket",
  "price": 55.99,
  "description": "great outerwear jackets for Spring/Autumn/Winter,
suitable for many occasions, such as working, hiking, camping,
mountain/rock climbing, cycling, traveling or other outdoors. Good gift
choice for you or your family member. A warm hearted love to Father,
husband or son in this thanksgiving or Christmas Day.",
  "category": "men's clothing",
  "image": "https://fakestoreapi.com/img/71li-ujtlUL._AC_UX679_t.png",
  "rating": {
    "rate": 4.7,
    "count": 500
  },
  "id": 3
},
{
  "title": "Mens Casual Slim Fit",
  "price": 15.99,
  "description": "The color could be slightly different between on the
screen and in practice. / Please note that body builds vary by person,
therefore, detailed size information should be reviewed below on the
product description.",
  "category": "men's clothing",
  "image": "https://fakestoreapi.com/img/71YXzeOuslL._AC_UY879_t.png",
  "rating": {
    "rate": 2.1,
    "count": 430
  },
  "id": 4
},
{
  "title": "White Gold Plated Princess",
  "price": 9.99,
  "description": "Classic Created Wedding Engagement Solitaire Diamond
Promise Ring for Her. Gifts to spoil your love more for Engagement,
Wedding, Anniversary, Valentine's Day...",
  "category": "jewelery",
  "image":
"https://fakestoreapi.com/img/71YAIFU48IL._AC_UL640_QL65_ML3_t.png",
  "rating": {
    "rate": 3,
    "count": 400
  },
  "id": 7
},
{
  "title": "Pierced Owl Rose Gold Plated Stainless Steel Double",
  "price": 10.99,
```

```
    "description": "Rose Gold Plated Double Flared Tunnel Plug Earrings.  
Made of 316L Stainless Steel",  
    "category": "jewelery",  
    "image":  
"https://fakestoreapi.com/img/51UDEzMJVpL._AC_UL640_QL65_ML3_t.png",  
    "rating": {  
        "rate": 1.9,  
        "count": 100  
    },  
    "id": 8  
},  
{  
    "title": "WD 2TB Elements Portable External Hard Drive - USB 3.0 ",  
    "price": 64,  
    "description": "USB 3.0 and USB 2.0 Compatibility Fast data transfers  
Improve PC Performance High Capacity; Compatibility Formatted NTFS for  
Windows 10, Windows 8.1, Windows 7; Reformatting may be required for  
other operating systems; Compatibility may vary depending on user's  
hardware configuration and operating system",  
    "category": "electronics",  
    "image": "https://fakestoreapi.com/img/61IBBVJvSDL._AC_SY879_t.png",  
    "rating": {  
        "rate": 3.3,  
        "count": 203  
    },  
    "id": 9  
},  
{  
    "title": "BIYLACLESEN Women's 3-in-1 Snowboard Jacket Winter Coats",  
    "price": 56.99,  
    "description": "Note:The Jackets is US standard size, Please choose  
size as your usual wear Material: 100% Polyester; Detachable Liner  
Fabric: Warm Fleece. Detachable Functional Liner: Skin Friendly,  
Lightweight and Warm.Stand Collar Liner jacket, keep you warm in cold  
weather. Zippered Pockets: 2 Zippered Hand Pockets, 2 Zippered Pockets on  
Chest (enough to keep cards or keys)and 1 Hidden Pocket Inside.Zippered  
Hand Pockets and Hidden Pocket keep your things secure. Humanized Design:  
Adjustable and Detachable Hood and Adjustable cuff to prevent the wind  
and water,for a comfortable fit. 3 in 1 Detachable Design provide more  
convenience, you can separate the coat and inner as needed, or wear it  
together. It is suitable for different season and help you adapt to  
different climates",  
    "category": "women's clothing",  
    "image": "https://fakestoreapi.com/img/51Y5NI-I5jL._AC_UX679_t.png",  
    "rating": {  
        "rate": 2.6,  
        "count": 235  
    },  
    "id": 15
```

```
    },
    {
      "title": "Lock and Love Women's Removable Hooded Faux Leather Moto Biker Jacket",
      "price": 29.95,
      "description": "100% POLYURETHANE(shell) 100% POLYESTER(lining) 75% POLYESTER 25% COTTON (SWEATER), Faux leather material for style and comfort / 2 pockets of front, 2-For-One Hooded denim style faux leather jacket, Button detail on waist / Detail stitching at sides, HAND WASH ONLY / DO NOT BLEACH / LINE DRY / DO NOT IRON",
      "category": "women's clothing",
      "image": "https://fakestoreapi.com/img/81XH0e8fefL._AC_UY879_t.png",
      "rating": {
        "rate": 2.9,
        "count": 340
      },
    },
    {
      "id": 16
    },
    {
      "title": "Rain Jacket Women Windbreaker Striped Climbing Raincoats",
      "price": 39.99,
      "description": "Lightweight perfect for trip or casual wear---Long sleeve with hooded, adjustable drawstring waist design. Button and zipper front closure raincoat, fully stripes Lined and The Raincoat has 2 side pockets are a good size to hold all kinds of things, it covers the hips, and the hood is generous but doesn't overdo it.Attached Cotton Lined Hood with Adjustable Drawstrings give it a real styled look.",
      "category": "women's clothing",
      "image": "https://fakestoreapi.com/img/71HblAHs5xL._AC_UY879_-2t.png",
      "rating": {
        "rate": 3.8,
        "count": 679
      },
    },
    {
      "id": 17
    },
    {
      "title": "MBJ Women's Solid Short Sleeve Boat Neck V ",
      "price": 9.85,
      "description": "95% RAYON 5% SPANDEX, Made in USA or Imported, Do Not Bleach, Lightweight fabric with great stretch for comfort, Ribbed on sleeves and neckline / Double stitching on bottom hem",
      "category": "women's clothing",
      "image": "https://fakestoreapi.com/img/71z3kpMAYsL._AC_UY879_t.png",
      "rating": {
        "rate": 4.7,
        "count": 130
      },
    },
    {
      "id": 18
    }
  ]
}
```

```

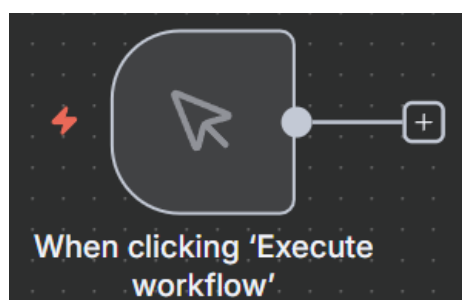
},
{
  "title": "Opna Women's Short Sleeve Moisture",
  "price": 7.95,
  "description": "100% Polyester, Machine wash, 100% cationic polyester interlock, Machine Wash & Pre Shrunk for a Great Fit, Lightweight, roomy and highly breathable with moisture wicking fabric which helps to keep moisture away, Soft Lightweight Fabric with comfortable V-neck collar and a slimmer fit, delivers a sleek, more feminine silhouette and Added Comfort",
  "category": "women's clothing",
  "image": "https://fakestoreapi.com/img/51eg55uWmdL._AC_UX679_t.png",
  "rating": {
    "rate": 4.5,
    "count": 146
  },
  "id": 19
},
{
  "title": "DANVOUY Womens T Shirt Casual Cotton Short",
  "price": 12.99,
  "description": "95%Cotton,5%Spandex, Features: Casual, Short Sleeve, Letter Print,V-Neck,Fashion Tees, The fabric is soft and has some stretch., Occasion: Casual/Office/Beach/School/Home/Street. Season: Spring,Summer,Autumn,Winter.",
  "category": "women's clothing",
  "image": "https://fakestoreapi.com/img/61pHAEJ4NML._AC_UX679_t.png",
  "rating": {
    "rate": 3.6,
    "count": 145
  },
  "id": 20
}
]

```

### 4.3. Ejercicio 3: Planificador de Festivos (Dificultad: Alta)

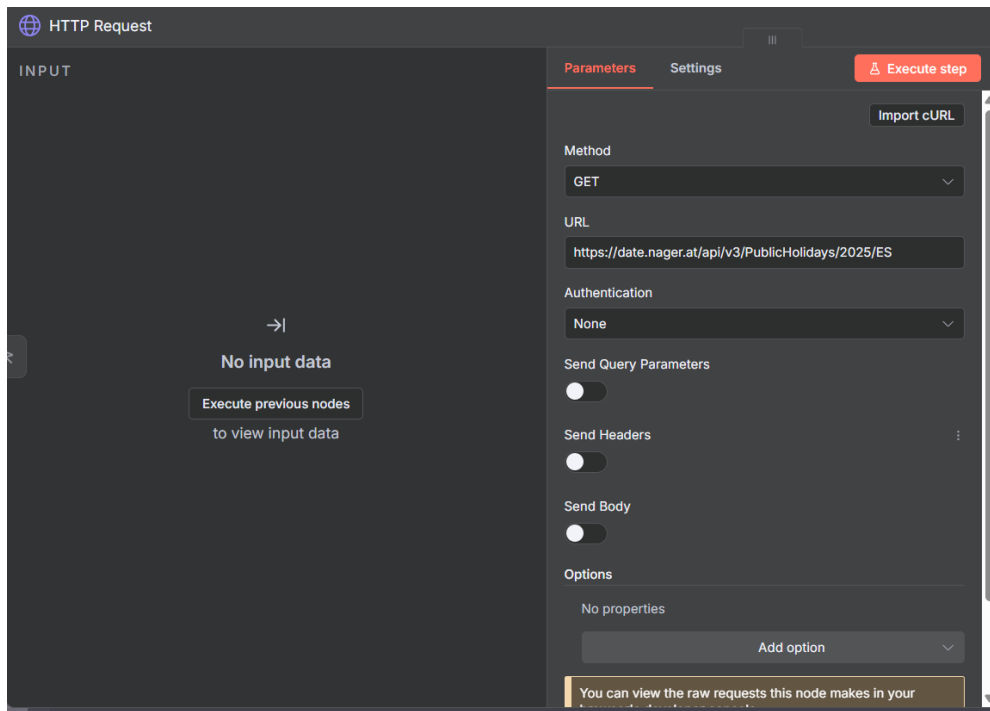
1. El flujo de trabajo debe iniciarse manualmente (Manual Trigger).

En nuestro nuevo workflow, añadimos en componente inicial Manual Trigger.



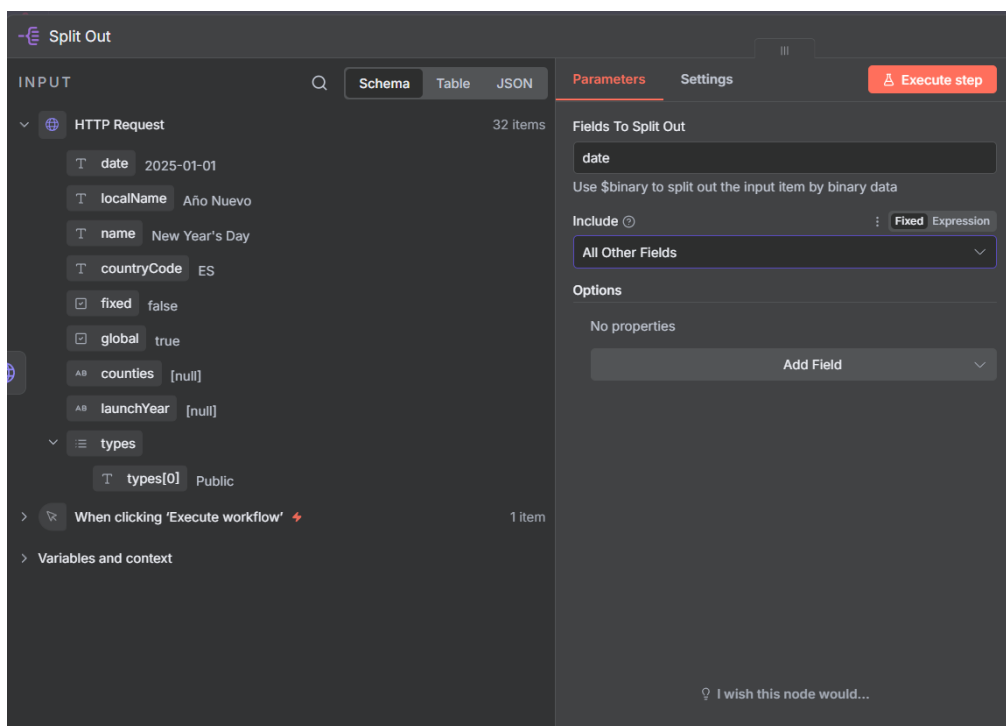
## 2. Obtener la lista de festivos de España para 2025.

Conectado al nodo anterior, creamos un componente HTTP request con la url dada para obtener los días festivos en España:



## 3. Usar Split Out para procesar cada festivo.

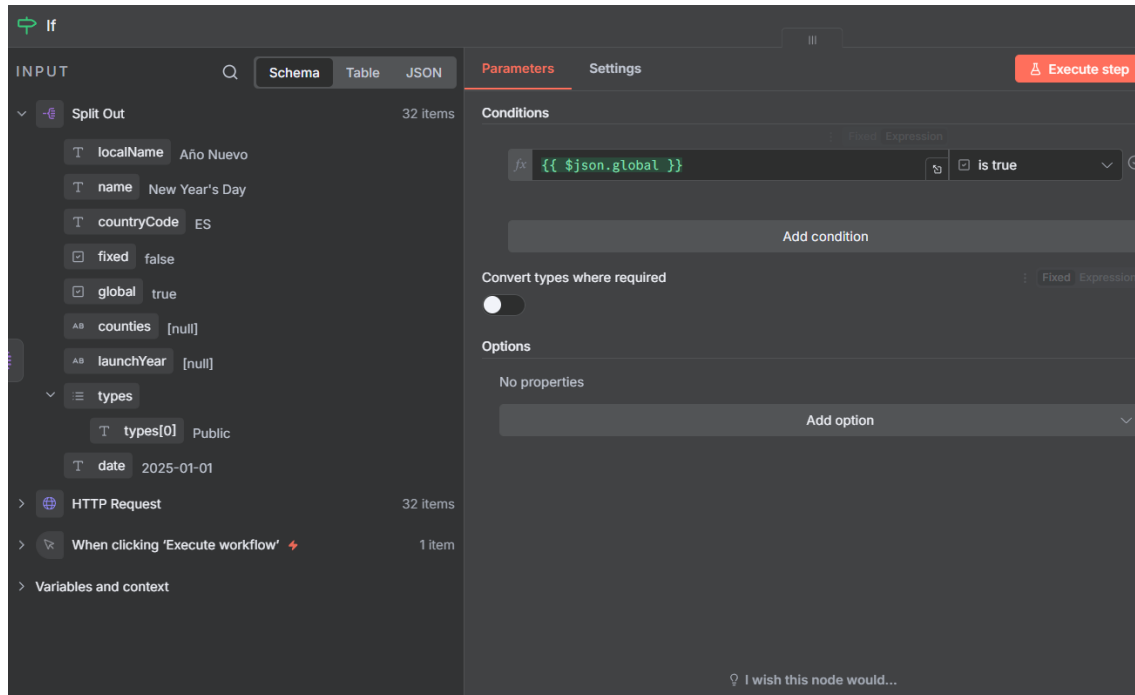
Utilizamos un Split out para separar los festivos, de la salida del nodo anterior, en diferentes ítems según sus fechas. Incluimos los subcampos de cada festivo en la salida de este nodo.





4. Usar un nodo IF para determinar si un festivo es nacional. (Pista: el campo global en la respuesta de la API es un booleano que indica esto).

Creamos un if para filtrar los festivos y operar en el futuro solo con festivos nacionales. El campo global en un festivo determina si un festivo es nacional. Por tanto, establecemos como condición que el campo global de un festivo sea verdadero.



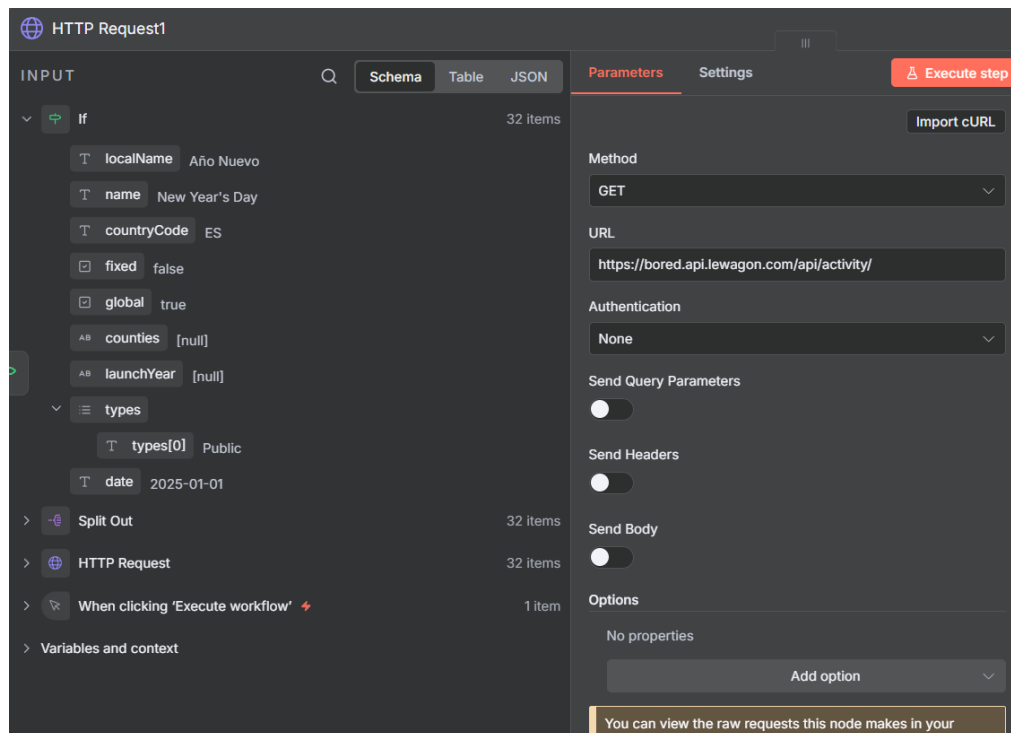
5. Solo para la rama true (festivos nacionales):

- Añadir un segundo nodo HTTP Request que llame a la Bored API para obtener una actividad aleatoria.
- Añadir un nodo Edit Fields (Set) para combinar la información del festivo con la actividad sugerida. La salida final para estos ítems debe contener, como mínimo, el nombre del festivo (name) y la actividad (activity).

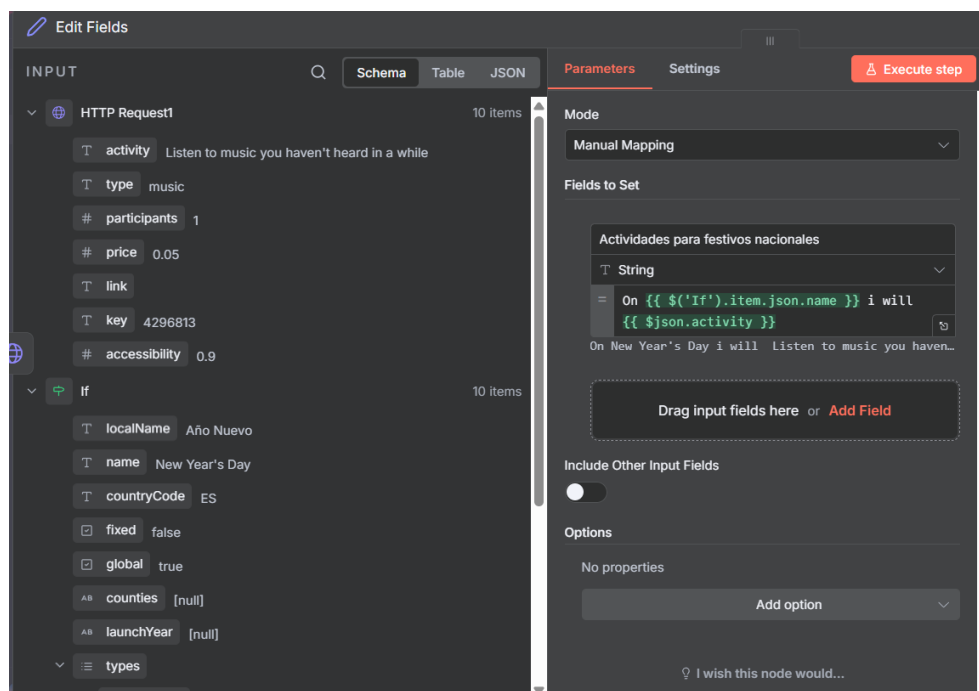
Al probar la API dada en la actividad nos encontramos que está caída, por lo que investigando el repositorio de la API en GitHub, encontramos que en un issue mencionan que la url oficial ha cambiado a la siguiente para las actividades:

<https://bored.api.lewagon.com/api/activity/>

A partir de la rama true del IF creamos un componente HTTP request con la url anterior para obtener una actividad aleatoria por cada día festivo nacional en España.

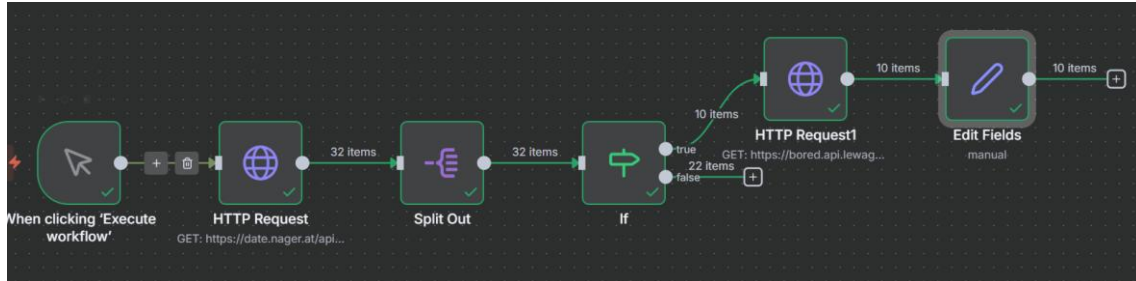


Seguido de este, creamos un nodo Edit Field el cual devolverá en forma de texto plano una actividad para cada festivo nacional, indicando tanto el festivo como la actividad de la que se trata. Ya que las actividades están en inglés, el nombre del festivo nacional y la frase que mostrará también serán en inglés para una mayor coherencia.



6. La rama false (festivos no nacionales) no debe realizar ninguna acción adicional.

Observamos como no realizamos ninguna operación sobre los festivos no nacionales en la rama false del IF.



## 7. Resultados:

Por último, observamos la salida tanto del Edit Field, como del HTTP Request de actividades y del IF en formato JSON. Tal y como se pide en el apartado, se asigna una actividad para cada festivo nacional:

**Logs**

Success in 511ms

When clicking 'Execute wor...

HTTP Request

Split Out

If

HTTP Request1

Edit Fields

Edit Fields Success in 18ms

**OUTPUT**

**Actividades para festivos nacionales**

On New Year's Day i will \n Do yoga

On Epiphany i will \n Shred old documents you don't need anymore

On Good Friday i will \n Make a couch fort

On Labour Day i will \n Bake pastries for you and your neighbor

On Assumption i will \n Pick up litter around your favorite park

On National Day of Spain i will \n Fill out a basketball bracket

On All Saints Day i will \n Listen to a new podcast

On Constitution Day i will \n Make a new friend

On Immaculate Conception i will \n Pull a harmless prank on one of your friends

On Christmas Day i will \n Learn how to make a website

HTTP Request1 Success in 389ms							
OUTPUT							
activity	type	participants	price	link	key	accessibility	
Do yoga	recreational	1	0	empty	4688012	0.9	
Shred old documents you don't need anymore	busywork	1	0	empty	2430066	0	
Make a couch fort	recreational	1	0	empty	2352669	0.08	
Bake pastries for you and your neighbor	cooking	1	0.4	empty	8125168	0.3	
Pick up litter around your favorite park	charity	1	0	empty	4894697	0.05	
Fill out a basketball bracket	recreational	1	0	empty	7806284	0.1	
Listen to a new podcast	relaxation	1	0.05	empty	4124860	0.12	
Make a new friend	social	1	0	empty	1000000	0	
Pull a harmless prank on one of your friends	social	1	0.1	empty	1288934	0.2	
Learn how to make a website	education	1	0.1	empty	9924423	0.3	

Salida if:

```
[
  {
    "localName": "Año Nuevo",
    "name": "New Year's Day",
    "countryCode": "ES",
    "fixed": false,
    "global": true,
    "counties": null,
    "launchYear": null,
    "types": [
      "Public"
    ],
    "date": "2025-01-01"
  },
  {
    "localName": "Día de Reyes / Epifanía del Señor",
    "name": "Epiphany",
    "countryCode": "ES",
    "fixed": false,
    "global": true,
    "counties": null,
    "launchYear": null,
    "types": [
      "Public"
    ],
    "date": "2025-01-06"
  },
  {
    "localName": "Viernes Santo",
    "name": "Good Friday",
    "countryCode": "ES",
    "fixed": false,
    "global": true,
    "counties": null,
    "launchYear": null,
    "types": [
      "Public"
    ],
    "date": "2025-04-18"
  },
  {
    "localName": "Fiesta del trabajo",
    "name": "Labour Day",
    "countryCode": "ES",
    "fixed": false,
    "global": true,
    "counties": null,
```

```
"launchYear": null,
"types": [
  "Public"
],
"date": "2025-05-01"
},
{
  "localName": "Asunción",
  "name": "Assumption",
  "countryCode": "ES",
  "fixed": false,
  "global": true,
  "counties": null,
  "launchYear": null,
  "types": [
    "Public"
  ],
  "date": "2025-08-15"
},
{
  "localName": "Fiesta Nacional de España",
  "name": "National Day of Spain",
  "countryCode": "ES",
  "fixed": false,
  "global": true,
  "counties": null,
  "launchYear": null,
  "types": [
    "Public"
  ],
  "date": "2025-10-12"
},
{
  "localName": "Día de todos los Santos",
  "name": "All Saints Day",
  "countryCode": "ES",
  "fixed": false,
  "global": true,
  "counties": null,
  "launchYear": null,
  "types": [
    "Public"
  ],
  "date": "2025-11-01"
},
{
  "localName": "Día de la Constitución",
  "name": "Constitution Day",
  "countryCode": "ES",
```

```
    "fixed": false,
    "global": true,
    "counties": null,
    "launchYear": null,
    "types": [
      "Public"
    ],
    "date": "2025-12-06"
  },
  {
    "localName": "Inmaculada Concepción",
    "name": "Immaculate Conception",
    "countryCode": "ES",
    "fixed": false,
    "global": true,
    "counties": null,
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