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!pip install ipywidgets requests
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Using cached jedi-0.19.1-py2.py3-none-any.whl (1.6 MB)
Installing collected packages: jedi
Successfully installed jedi-0.19.1
```

```
import requests
import ipywidgets as widgets
from IPython.display import display, clear_output

# Function to fetch exchange rates from an API
def get_exchange_rate(to_currency):
    api_url = f"https://api.exchangerate-api.com/v4/latest/USD"
    response = requests.get(api_url)
    data = response.json()
    return data['rates'].get(to_currency, None)

# Function to convert USD to selected currency
def convert_currency(b):
    try:
        usd_amount = float(usd_input.value)
        to_currency = currency_dropdown.value

        if to_currency == "":
            result_label.value = "Please select a currency."
```

```

        return

    exchange_rate = get_exchange_rate(to_currency)
    if exchange_rate is None:
        result_label.value = f"Exchange rate for {to_currency} not available."
        return

    converted_amount = usd_amount * exchange_rate
    result_label.value = f"{usd_amount} USD = {converted_amount:.2f} {to_currency}"

except ValueError:
    result_label.value = "Please enter a valid amount in USD."
except Exception as e:
    result_label.value = str(e)

# Creating the widgets
usd_input = widgets.FloatText(description="Amount in USD:", value=1.0)
currency_dropdown = widgets.Dropdown(
    options=["EUR", "GBP", "JPY", "INR", "AUD", "CAD", "CHF", "CNY", "SEK", "NZD"],
    description="Convert to:"
)

convert_button = widgets.Button(description="Convert")
result_label = widgets.Label(value="")

# Display widgets
display(usd_input, currency_dropdown, convert_button, result_label)

# Bind the button click event to the function
convert_button.on_click(convert_currency)

```



The screenshot shows a web-based currency converter interface. It features a text input field labeled "Amount in ..." containing the value "100". Below it is a dropdown menu labeled "Convert to:" with "EUR" selected. A "Convert" button is positioned below the dropdown. At the bottom of the interface, the result is displayed as "100.0 USD = 89.60 EUR".