Tab 1

```
import numpy as np
import pandas as pd
import random
import string
from collections import Counter

def is_prime(n):
    if n < 2:
        return False
    for i in range(2, int(n ** 0.5) + 1):
        if n % i == 0:
            return False
    return True

def fibonacci(n):
    if n <= 0:
        return []
    elif n == 1:
        return [0]
    elif n == 2:
        return [0, 1]
    else:
        seq = fibonacci(n-1)
        seq.append(seq[-1] + seq[-2])
        return seq

def gcd(a, b):
    while b:
        a, b = b, a % b
    return a

def lcm(a, b):
    return abs(a * b) // gcd(a, b)

def add(x, y):
    return x + y

def subtract(x, y):
    return x - y

def multiply(x, y):
    return x * y

def divide(x, y):
```

```
    return x / y if y != 0 else "Cannot divide by zero"

def remove_duplicates(lst):
    return list(set(lst))

def create_dictionary():
    my_dict = {"a": 1, "b": 2, "c": 3, "d": 4, "e": 5}
    print(my_dict)

def numpy_matrix_operations():
    A = np.array([[1, 2], [3, 4]])
    B = np.array([[5, 6], [7, 8]])
    print("Matrix Addition:\n", A + B)
    print("Matrix Multiplication:\n", A @ B)
    print("Transpose of A:\n", A.T)

def read_csv_file(filename):
    df = pd.read_csv(filename)
    print(df.head())

def most_common_word(text):
    words = text.split()
    counter = Counter(words)
    return counter.most_common(1)[0][0] if words else None

def generate_random_password(length=12):
    characters = string.ascii_letters + string.digits + string.punctuation
    return ''.join(random.choice(characters) for _ in range(length))
```

Tab 2

DALL.E


alamy
Image ID: 2J12RT6
www.alamy.com

1. DALL·E:

DALL·E produced an image of a cat sleeping on a cloud with stars in the sky. The cat is depicted in a realistic style, with soft fur and a serene expression, lying comfortably on a fluffy cloud against a starry night backdrop.

2. Deep Dream Generator:

Deep Dream Generator's output features a cute cartoon elephant baby character dreaming and sleeping on a fluffy cloud. The image has a whimsical and colorful aesthetic, with the elephant surrounded by stars and a dreamy sky, giving it a playful and imaginative feel.

3. RunwayML:

RunwayML generated an illustration of a teddy bear sleeping on a cloud. The teddy bear is portrayed in a soft, pastel color palette, lying peacefully on a fluffy cloud with a gentle expression, set against a serene sky.

Comparison:

- **Artistic Style:**
  - *DALL·E:* Realistic depiction with attention to detail.
  - *Deep Dream Generator:* Whimsical and colorful, with a dreamlike quality.
  - *RunwayML:* Soft, pastel illustration with a serene atmosphere.
- **Subject Representation:**
  - *DALL·E:* Realistic cat on a cloud.
  - *Deep Dream Generator:* Cartoon elephant baby on a cloud.
  - *RunwayML:* Teddy bear on a cloud.
- **Overall Mood:**
  - *DALL·E:* Calm and peaceful.
  - *Deep Dream Generator:* Playful and imaginative.
  - *RunwayML:* Gentle and serene.

Conclusion:

Each AI tool offers a unique interpretation of the prompt:

- *DALL·E* provides a realistic and detailed image, suitable for projects requiring lifelike representations.
- *Deep Dream Generator* delivers a whimsical and colorful image, ideal for creative and imaginative contexts.
- *RunwayML* offers a soft and serene illustration, perfect for gentle and calming themes.

The choice of the "better" tool depends on the specific requirements of the project and the desired artistic style.