1. Web Scraper: Extract data from websites using libraries like Beautiful soup or Scrapy.

```
import requests
from bs4 import BeautifulSoup

# URL of the website to scrape.
url = "https://www.shadowfox.in"

try:
    # Sending a GET request to the website.
    response = requests.get(url)
    response.raise_for_status() # Checking for errors.

    # Parsing the HTML content.
    soup = BeautifulSoup(response.text, 'html.parser')

    # Extracting all of the headings.
    print("--- Scraping Data from", url, "\n")
    headings = soup.find_all(['h1', 'h2', 'h3'])

    for idx, heading in enumerate(headings, 1):
        print(idx, heading.get_text().strip())

    with open('scraped_headings.txt', 'w') as f:
        for heading in headings:
            f.write(heading.get_text().strip() + "\n")
    print("\n[Success] Data extracted and saved to 'scraped_headings.txt'")

except Exception as e:
    print("An error occurred:", e)
```

```
--- Scraping Data from https://www.shadowfox.in

1 We develop amazing websites for your business.
2 Future Concept.
3 The Big Idea.
4 Creative Solutions
5 About Us.
6 Custom Web Experiences
7 Digital Solutions
8 Agile Experts
9 Our Past Works.
10 Client - Tanjore Coffee Website
11 Our Client Stories.
12 Frequently Asked Questions.
13 What services do you offer?
14 How long does it take to build a website?
15 Do you provide website hosting and domain registration?
16 How do I get a quote for my project?
17 Support
18 Follow Us
19 Contact Us

[Success] Data extracted and saved to 'scraped_headings.txt'
```

2. Hangman: Implement the wordguessing game with visual progress and hints

```
import random

def get_hint(word):
    hints = {
        "india": "Country which is also known as the the Golden Bird.",
        "python": "A popular programming language named after a snake.",
        "shadowfox": "The name of this internship platform!",
        "cyber": "Relating to computers, information technology, and virtual reality.",
        "internship": "A period of work experience offered by an organization.",
        "development": "The process of creating or improving something."
    }
    return hints.get(word, "No hint available for this word.")

def play_hangman():
    words = ["india", "python", "shadowfox", "cyber", "internship", "development"]
    word = random.choice(words)
    guessed_letters = []
    attempts = 6

    stages = [
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    print("Welcome to ShadowFox Hangman!")
    print("Hint:", get_hint(word))

    while attempts > 0:
        print(stages[attempts])

        # Display the word with underscores
        display_word = [letter if letter in guessed_letters else "_" for letter in word]
        print("Word: " + " ".join(display_word))

        if "_" not in display_word:
            print("Congratulations! You guessed the word!")
            break

        guess = input("Guess a letter: ").lower()

        if guess in guessed_letters:
            print("You already guessed that letter.")
        elif guess in word:
            print("Good job!", guess, "is in the word.")
```

```
                guessed_letters.append(guess)
            else:
                print("Sorry", guess, "is not in the word.")
                attempts -= 1
                guessed_letters.append(guess)
                print("Attempts remaining:", attempts)

        if attempts == 0:
            print(stages[0])
            print("Game Over! The word was:", word)

    # Run the game
    play_hangman()
```

```
Welcome to ShadowFox Hangman!
Hint: Country which is also known as the the Golden Bird.

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           -

Word: _ _ _ _ _
Guess a letter: I
Good job! i is in the word.

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Word: i _ _ i _
Guess a letter: n
Good job! n is in the word.

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Word: i n _ i _
Guess a letter: d
Good job! d is in the word.

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Word: i n d i _
Guess a letter: i
You already guessed that letter.

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```