

Task 3: Password Generator

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```
import random
```

```
import string
```

```
def generate_password(length):
```

```
    characters = string.ascii_letters + string.digits + string.punctuation
```

```
    password = ''.join(random.choice(characters) for _ in range(length))
```

```
    return password
```

```
length = int(input("Enter the desired password length: "))
```

```
print("Generated Password:", generate_password(length))
```

Task 4: Rock-Paper-Scissors Game

Task 4: Rock-Paper-Scissors Game

```
import random
```

```
def get_computer_choice():
```

```
    return random.choice(['rock', 'paper', 'scissors'])
```

```
def determine_winner(user, computer):
```

```
    if user == computer:
```

```
        return "It's a tie!"
```

```
    elif (user == 'rock' and computer == 'scissors') or (user == 'scissors' and computer ==  
'paper') or (user == 'paper' and computer == 'rock'):
```

```
        return "You win!"
```

```
    else:
```

```
        return "Computer wins!"
```

```
while True:
```

```
    user_choice = input("Choose rock, paper, or scissors: ").lower()
```

```
    computer_choice = get_computer_choice()
```

```
    print(f"Computer chose: {computer_choice}")
```

```
    print(determine_winner(user_choice, computer_choice))
```

```
    play_again = input("Play again? (yes/no): ").lower()
```

```
    if play_again != 'yes':
```

```
        break
```

Task 5: Contact Book

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```
contacts = {}
```

```
def add_contact(name, number, email, address):
```

```
    contacts[name] = {'Number': number, 'Email': email, 'Address': address}
```

```
def view_contacts():
```

```
    for name, details in contacts.items():
```

```
        print(name, ":", details)
```

```
def search_contact(name):
```

```
    return contacts.get(name, "Contact not found.")
```

```
def update_contact(name, number=None, email=None, address=None):
```

```
    if name in contacts:
```

```
        if number:
```

```
            contacts[name]['Number'] = number
```

```
        if email:
```

```
            contacts[name]['Email'] = email
```

```
        if address:
```

```
            contacts[name]['Address'] = address
```

```
def delete_contact(name):
```

```
    if name in contacts:
```

```
del contacts[name]
```

Example usage:

```
add_contact("Alice", "1234567890", "alice@example.com", "Wonderland")
```

```
print(search_contact("Alice"))
```

```
update_contact("Alice", email="newalice@example.com")
```

```
view_contacts()
```

```
delete_contact("Alice")
```

```
view_contacts()
```