REVISION OF PYTHON LEVEL 1 :

- Understanding : Programming language , data , data types
- Variable : use, rules
- Input : Used to take data from user
- operators : Arithmatic , logical,Assignment,conditional
- constional statement : if , if else , if elif else
- Loops: for , while loop
- List,tuple,dictionary, set
- Function
- Module
- file operations

REVISION QUESTIONS

1. Ask user about his age and decide the age category. [1-10 - kid ,11-18 - Teenager,18-40 - Adult , 40 up - senior citezen]

2. Print all even numbers from 1-50

Creating a Banking App using functions

The App should have the following features

Simple Tasks

1. Create account (During account creation username,password and the initial depoist amount should be specified.)
2. The account holders should be able to login and logout from the account using password.
3. Account holders should be allowed to credit and debit Money.

Difficult Tasks

1. Remove account Holder
2. The app should have checks which limits the withrawal of amount bigger than the current balance in the account.
3. Should have a way to check the current balance

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1. **Make use of function for each task**

   ```
   def function_name():
   ```

2. **use dictionary of dictoinaries to store the account holders details**

   ```
   acc_hold = {"user1":{"pass":1234,"bal":50000},"user2":
   {"pass":5678,"bal":20000}}
   ```

Main dictionary to store all the account holders and their details

In [17]:
```
# account holder dictionary to store all the user details
acc_hold = {}
```

Global variables used for program state

In [18]:
```
# variables used to check the state of things
login = False
running  = True
```

Login function

In [ ]:
```
def login():
    global login
    user_name = input("Entet the user name : ")
    password = input("Entet the password : ")

    if user_name in acc_hold:
        if acc_hold[user_name]["pass"] == password:
            print("Logging in")
            login = True
            login_menu(user_name)
        else:
            print("wrong password")
    else:
        print("account not found")
```

Logout function

In [ ]:
```
def logout():
    global login
    login = False
    print("logging out")
```

Login Menu

In [ ]:
```
def login_menu(user):
    global login
    while login:
        print("For deposit press 1: ")
        print("For withdrawal press 2: ")
        print("For logout press 3: ")

        x = int(input("Enter your choice: "))
```

```
        if x == 1:
            dep = int(input("Enter deposit amount: "))
            acc_hold[user]["bal"] = acc_hold[user]["bal"]+dep
            print("current balance is:",acc_hold[user]["bal"])

        elif x == 2:
            wit = int(input("Enter withdraw amount: "))
            if wit > acc_hold[user]["bal"]:
                print("not sufficient balance.")
            else:
                acc_hold[user]["bal"] = acc_hold[user]["bal"]-wit
                print("current balance is:",acc_hold[user]["bal"])

        elif x == 3:
            logout()
```

Function to create account

In [ ]:

```
def create_acc():
    user_name = input("Entet the user name: ")
    password = input("Entet the password: ")
    int_dep = int(input("Enter a deposit amount: "))

    if  user_name in acc_hold:
        print("user name already taken")
    else:
        acc_hold[user_name] = {"pass":password,"bal":int_dep}
        print("account created")
```

Function for the main menu of the banking app

In [ ]:

```
def main_menu():
    print("Welcome to the banking app.")
    print("For login press 1: ")
    print("For creating new account press 2: ")
    print("For exiting the app press 3: ")

    x = int(input("Enter your choice: "))

    if x == 1:
        login()
    elif x == 2:
        create_acc()
    elif x == 3:
        exit()
```

Function exit the banking app

In [ ]:

```
def exit():
    global running
    print("closing the app")
    running = False
```

While true loop to keep the app running.

In [ ]:

```
while running:
    main_menu()
```

HOMEWORK

1. Write a program to find out factorial of given number
2. Write a function to find the sum of all even number from 1-20
