**Assignment Set 2**

* Write a program to print below pattern

Input :n = 4

Out put = A

b C

D e F

g H I J

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* **Problem Scenario:** Product Search in an Online Store

You are working on an e-commerce platform, and you need to allow customers to search for products in the catalog. The product names are stored as a list of strings. The program should:

1.Accept a search query (string) from the user.

2.Loop through the product list and find products that match the search query.

3.If a product name contains the search query (case-insensitive), display the product.

4.If no product is found, display a "No results found" message.

**ans)**

productNames = ["Mobile", "Earphone", "Bike", "Shirts", "Laptops"]

search = input("Enter the Search Item")

for x in productNames:

if(search == x):

print(f"Itesm {search} is found")

break

else:

print("Sorry No results found")





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**3. problem**: Write a Python program to convert a month name to a number of days. Expected Output:

List of months: January, February, March, April, May, June, July, August

, September, October, November, December

Input the name of Month: February

No. of days: 28/29 days

ans)

from datetime import datetime

def days\_in\_month(month)

months = {1:"January", 2:"February", 3:"March", 4:"April", 5:"May", 6:"June", 7:"July", 8:"August", 9:"September", 10:"October", 11:"November", 12:"December"}

return days\_in\_month.get(month, "Invalid Month")

month = input("Enter the month");

days\_in\_month(month)

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4. Create an ATM withdrawal system that allows users to check their balance, deposit, and withdraw money. Implement conditions to ensure:

* Withdrawals are allowed only if the user has sufficient balance.
* A withdrawal fee of 2% is applied to each withdrawal.

ans)

amount = 10000

def withdraw(draw):

if(draw < amount):

balance = (amount - draw) - (amount - draw)\*2/100

print("After Withdraw Balance",balance)

def deposite(depo):

balance = (amount + depo)

print("After deposite Balance",balance)

withdraw(2000)

deposite(1000)





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5. Write a Python program to get the next day of a given date. Expected **Output:**

Input a year: 2016

Input a month [1-12]: 08

Input a day [1-31]: 23

The next date is [yyyy-mm-dd] 2016-8-24

ans)

year = int(input("Enter the year ")

month = int(input("Enter the Month")

day = int(input("Enter the day")

date = day + month + year

print(date)

next = next.date()

print(next)