**LAB RECORD ON PROGRAMMING**

***Submitted in partial fulfilment of the***

***award of the degree of***

***Master of Computer Application (MCA)***

****

**DEPARTMENT OF COMPUTER APPLICATIONS**

**P A AZIZ COLLEGE OF ENGINEERING & TECHNOLOGY**

**SEMESTER – 1**

**MCA BATCH – 2021-‘23**

**FACE SHEET**

**NAME:**

**BATCH:**

**SUBJECT:**

**NAME OF THE FACULTY SUPERVISOR:**

**P.A. AZIZ COLLEGE OF ENGINEERING AND TECHNOLOGY**

**GREEN HILLS, KARAKULAM PO, TRIVANDRUM, KERALA 695564**



**CERTIFICATE**

***This is to certify that Mr. / Ms.***  ***Of class Enrolment No has Satisfactorily completed the course in as***

***by the Kalam Technological University for Year (B.E.) semester of***

***Master of Computer Applications in the Academic year \_\_\_\_\_****- .*

***Date of Submission:-***

Faculty Name and Signature **Head of Department**

(Asst. Prof…………..) **(MCA)**

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**PROGRAM – 1**

**AIM: FIND THE RADIUS OF A CIRCLE**

from math import pi

radius = float(input("Enter radius of Circle : "))

print("Area of the circle is : ",pi\*radius\*radius)

**PROGRAM – 2**

**AIM: CALCULATION OF SIMPLE INTEREST**

Principle\_amount = float(input("Enter Principle Amount : "))

year = int(input("How much years : "))

rate = float(input("Rate : "))

print("Simple Interest is : ",(Principle\_amount \* year \* rate)/100)

**PROGRAM – 3**

**AIM: SWAPPING TWO NUMBERS USING TEMPORARY VARIBLES**

number\_1 = int(input("Enter first no : "))

number\_2 = int(input("Enter second no : "))

print("Before Swapping ")

print("A = ",number\_1," B = ",number\_2)

number\_1 = number\_1 + number\_2

number\_2 = number\_1 - number\_2

number\_1 = number\_1 - number\_2

print("After Swapping")

print("A = ",number\_1," B = ",number\_2)

**PROGRAM – 4**

**AIM: CONVERT CELISUS TO FARENHEIT**

mul\_value =1.8

add\_value =32

celsius = int(input("Enter celsius : "))

fahrenheit = (celsius \* mul\_value) + add\_value

print("C = ",celsius," F =  ",fahrenheit)

**PROGRAM – 5**

**AIM: CHECK THE GIVEN NUMBER IS ODD OR EVEN**

number = int(input("Enter a number to check ODD or Even : "))

if number%2 == 0:

    print(number," is Even")

else:

    print(number," is Odd")

**PROGRAM – 6**

**AIM: TO FIND THE LARGEST NUMBER FROM THE GIVEN NUMBER**

print("Enter 3 numbers \n")

num1=int(input("first number : "))

num2=int(input("second number : "))

num3=int(input("third number : "))

if num1>num3 and num1>num2:

    print(num1," is large")

elif num2>num3:

    print(num2," is large")

else:

    print(num3," is large")

**PROGRAM – 7**

**AIM: CHECK THE YEAR IS LEAP YEAR OR NOT A LEAP YEAR**

year = int(input("Enter a year to check leap year or not : "))

if year%400==0 or (year%4 and year%100!=0):

    print(year," is not leap year")

else:

    print(year," is leap year")

**PROGRAM – 8**

**AIM: TO FIND THE NUMBERS IN THE LIST**

N=int(input("Enter Total number of elements in list : "))

lists=[]

for i in range(N):

    value=int(input("Enter a number :"))

    lists.append(value)

test = [each for each in lists if each>0]

print(test)

"""for i in lists:

     if i>0:

        print(i)"""

**PROGRAM – 9**

**AIM: TO FIND THE VOWELS IN THE WORD**

word = input("Enter word : ")

vowels = "aeiouAEIOU"

vowels\_list = [each for each in word if each in vowels]

print(vowels\_list)

**PROGRAM – 10**

**AIM: REPLACE THE STRING TO CHARACTER**

main\_string = input("Type a string : ")

char = main\_string[0]

main\_string = main\_string.replace(char,'$')

print(char+main\_string[1:])

**PROGRAM – 11**

**AIM: TO COUNT A STRRING FROM LONGER STRING**

string = input("Enter a long string : ")

string=string.split(" ")

listed=[]

count=-1

all\_count=[]

for i in string:

    if(i not in listed):

        listed.append(i)

print(listed)

for i in listed:

    count=count+1

    all\_count.append(0)

    for j in string:

        if(i == j):

            all\_count[count] +=1;

for i in range(len(listed)):

    print(listed[i], "  :  ",all\_count[i])

print(all\_count)

"""string = input("Enter a long string : ")

search = input("Enter searchble string : ")

string=string.split(" ")

count=0

for i in string:

    if(i == search):

        count=count+1

print(count)"""

"""

str = input("Enter the string: ")

str = str.lower()

str\_list = list(str.split(" "))

print(str\_list)

str\_set = list(set(str\_list))

print(str\_set)

for word in str\_set:

    print(word, " = ", str\_list.count(word))

"""

**PROGRAM – 12**

**AIM: SORT WORDS IN ASCENDING AND DESCENDING ORDER**

dic={}

n1=int(input("Total number of elements in dict 1 : "))

for i in range(n1):

    dic[i]=input("Enter element : ")

print(sorted(dic.items(), key = lambda kv:(kv[1], kv[0])))

print(sorted(dic.items(), key = lambda kv:(kv[1], kv[0]), reverse=True))

"""asc=sorted(dic.values())

print(asc)

asc.reverse()

print(asc)

print(sorted(dic.values()))

print(type(sorted(dic.values())))

print(type(dic.values()).re)"""

**PROGRAM – 13**

**AIM: TO FIND THE GCD OF TWO NUMBERS**

a = int(input("Type the first number : "))

b = int(input("Type the second number : "))

while b != 0:

    r = a % b

    a = b

    b = r

print("The GCD of the numbers is", a)

**PROGRAM – 14**

**AIM: TO FIND FIBERNOCI RECURSIVE FUNCTION**

def recur\_fibo(n):

   if n <= 1:

       return n

   else:

       return(recur\_fibo(n-1) + recur\_fibo(n-2))

n=int(input("Enter the number:"))

recur\_fibo(n)

for i in range(n):

    print(recur\_fibo(i))

"""#This program print Fibonacci sequence #upto a given number

a, b = 1, 1

c=0

def fibernoci(n):

    if globals()['c'] == 0:

        if n>0:

            print(0)

    if n!=1:

        print(globals()['a'])

        globals()['a'], globals()['b'] = globals()['b'], globals()['a']+globals()['b']

        n-=1

        globals()['c']=1

        fibernoci(n)

n=int(input("Enter the number:"))

fibernoci(n)"""

**PROGRAM -15**

**AIM: NUMBER PATTERN PYRAMID**

def pattern(number):

    for i in range(1,number+1):

        for j in range(1,i+1):

            print(j\*i,end=" ")

        print("\n")

n=int(input("Limit : "))

pattern(n)