NAME – RACHANA CHAVAN

Q1. Ask user to enter the wordand create the triangle for given word. For Example if input is "Cristmas" then output should be in the given formatC

CR

CRI

CRIT

CRITM

CRITMA

CRITMAS

```python
word = input("Enter a word: ")

n = ''

for i in range(len(word)):

    n = n + word.upper()[i]

    print(n)
```

Q2. Ask user to Enter the mobile number and create a function to validate mobile number

```python
mob_num = input("Enter mobile number: ")


def ValidateMobNum(mob_num):

    if mob_num.isdigit() and len(mob_num) == 10:

        print("Valid mobile number.")

    else:

        print("Invalid mobile number.")


ValidateMobNum(mob_num)
```

Q3. d1={'a' : 200, 'b' : 300, 'c' : 10}
create a function to accept the above dictionary and return sum of total values

```python
d1={'a' : 200, 'b' : 300, 'c' : 10}


def DictSum(d1):

    sum = 0

    for i in d1:

        sum += d1[i]

    return sum


total = DictSum(d1)

print(total)


# Q4. Create the function to calculate the maturity amount when deposit amount and interest rate is given.

# Interest rate can not be more than 7% and in negative.

deposit = int(input("Enter deposit amount: "))

rate = int(input("Enter rate of interest: "))


def MaturityAmount(deposit, rate):

    if rate > 7 or rate < 0:

        print("Enter rate between 0-7 %.")

    else:

        interest = (deposit*rate)/100

        maturity = deposit + interest

    return maturity


final_amt = MaturityAmount(deposit, rate)

print(final_amt)


# Q5. Create a function to calculate largest and smallest value from the list


def LargestVal(l1):
```

```python
        max_val = max(l1)

    min_val = min(l1)


    return max_val, min_val


print(LargestVal(l1 = [1,2,3,4]))


#Q6. d1= {1:{'name': "nilesh", mobile: '789890678'},  2: {'name': "Jasmin", 'mobile': '6567788789'}
# create a function to acccept information from user like either id or name
# if user is entering name then roll number and mobile should be displayed.
# if id is given then name and mobile number should be displayed


d1= {1:{'name': "nilesh", 'mobile': '789890678'},  2: {'name': "Jasmin", 'mobile': '6567788789'}}
# print(d1[1].values())


def info(d1):
    data = input("Enter either ID or name: ")


    if data.isdigit():
        data = int(data)
        if data in d1.keys():
            print(d1[data]['name'], d1[data]['mobile'] )
        else:
            print("ID not in dict.")


    else:
        if data in d1[1].values():
            print(d1['mobile'])


        else:
            print("Name not in dict.")
```

info(d1)

```
# Q7.d1 = {'n':20, 'm':30, 'o':30}d2= {'n' : 47, 'x':20, "y":34}
# d1 and d2 are two dictionaries. Merge two dictionaries if keys are different.
# for same keys add valuesoutput = {'n': 67, 'm':30, 'o':30, 'x':20, 'y':34}


d1 = {'n':20, 'm':30, 'o':30}
d2 = {'n' : 47, 'x':20, "y":34}


output = d1.copy()
for key, value in d2.items():
    if key in output:
        output[key] += value
    else:
        output[key] = value
print(output)
```