```
TASK-2 Implement conditional, control and looping
                                              01108102
                Statement
  (a) water level monitoring System (y-ely)
  Aim: A dam monitoring system checks the water
       level and issues warning, write a python
       program that takes water level (in meters)
       as input and prints:
    * "Low water level " if level < 50
    * "Normal water level" if 50 \ level \ 80
    * "High water level - Caution" if level > 80
  Algorithm ;
   1. Start the program
  2. prompt the uses to input the water level (in meter)
   3. Convert the input to numeric value
   4. Check the water level:
   → If water level is less than 50, print "Low water
      level".
   > the level is between 50 to 80, print"
      Normal water level".
   → Else print "High water level - cavition"
   5. Stop
    - margary
     level = float (input ("Enter the water level (in meters);")
     y level < 50:
          print (" fow water luce:")
      ely 50< / level <= 80
         prist ("Normal water level")
```

print (" High water level - courtier")

else:

output: Enter the water level (in meters): 100 High water level - caution to-oth start The state that were 10 mosse 347 goding 154 the so wit to execute of respector to execute. मंद्री वर्षि संदेश वर्षात हितामान्य - १८०० वर्षावर्षा द्वावर्ष्यां म * the -- con side to does not gunliful the school the scentit ipt. End with a fire I would ("inter months for skill cost 1:0)) : avien mark & rist (in function in another for steering in in the ((" Enter somethis per still Est 3: 1) 01 = 412001 - desig of most 1 > = Face-mari Lond nauch 2 wind involves > = pass - maint : part (" candidates qualifies in all skills test ") finit (" comdidate does not gualify") SICH MITH BATE

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b) Multiplication table Generator (For Loop)

AIM: A teaching app needs to generate multiplication table. Write a python program that takes a number as input and print its multiplication table upto 10 using a for loop.

(eg: input -> 3 -> output: 3, 6, 9. ... 30)

Algorithm

- 1. Stoot the program
- 2. prompt the uses to input a number
- 3. convert the input to an integer
- 4. For each number from 1 to 10 (inclusive)
 - -> calculate the product of input number and i.
 - -> print the product, seperated by spaces or line by line.
 - 5. End the program

-: washard

number = int (input ("Enter a number:")) print ("Multiplication table for", " up to 10:") for i in range (1,11):

print (number * 1, end = ")

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1 - mines Males
   Output
   Enter a number: 2011 principal of the
   Multiplication table for a upto 16:
    24 6 8 10 12 14 16 18 20
  medium mate takes water level (in material)
                        he signed and printe:
      Mormal weaker Level " if 50 = level = 80
       "High water Level - Courtiere" if level > 80
                                           i coulding
                               sink the program
mampt the resers to impute the weeker Level (in motor)
              towest the vigue to numeric value
                         thack the water level:
If water level is less than 50, paint "Low water
                                          livet",
 Elber of the level is between 50 to 80 , print "
                           Normal water luce.
          Able print "High water livel - cartism"
                                             Gas?
                                          - morgan
And : dioub (input ( " finer the water land ( in meter).
                                   12 5 50 5 P
                 Print ("Low water Lines:")
                            08 = > 20 will 5 3 62 619
                Balle ( Norman Marie Carl grown ) 2012
        Paint (" High western Level - Courties, ")
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Task-2(c) - OTP verification System (while loop)
Aim: An OTP verification system guies usen 3
     attempts to correct OTP, write a python
   program that simulates asking for an otp ("4507")
  upto 3 times until the Correct OTP is entered
     or attempts are executed,
 Algorithm :
i) Start the program
2) Set the correct OTP to "4567"
3) Initialize a variable attempts to 0.
4) Repeat while the number of attempts is less
  -prompt the user to enter an OTP.
  → If the entered OTP matches the Correct OTP.
       >print "OTP Verified Successfully!".
       Fruit the loop
  →Else:
      -> print " Incorrect off"
       -> Incorease the attempts by 1.
 (5) Ty the maximum number of attempts (3) is reached
  and oTP is still incorrect.
   -> print " Maximum attempts exceeded. OTP verification
                             failed
  6. End the program.
    brogram :
   Correct - otp = "4567"
   attempts = 0
    max - attempts = 3
   While attempts < man _ attempts:
          otp = input ("Enter OTP:")
```

ij otp == Correct_ otp:

print (" otp verified successfully!")

break

else:
print ("Incorrect OTP")

attempts + = 1

y attempts = = man _attempts and otp! = correct_otp: print ("Manimum attempts exceeded. OTP verification failed")

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PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
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TOTAL (10)	1 (7)
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Result: Thus the python program to implement conditional, Control and Looping statements was done Successfully.

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output a story of story of its
   Enten ofp: 2345
   Incorrect of
   Enter otp: 4567
   Otp verified Successfully!
                    work the progening to input
      (Such sounder Jacob I todo (inclusive)
staurlate the preduct of input number and i.
smit the product, seperated by spaces 00 line
                                  while by line.
                             End the program
                                    - Citabaid
       unber - lit (input (" Enter a mumbers = ))
 in: ( Mulliplication fable for ", 28, " up to 10: ")
                        (1) in range (2,11):
            from to ( or division of i could = " ")
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