```
* Calculation of total Infiliration by theton's Equation
 to . Coat (input ( Tater the value of initial infiltration fate 6"))
 for final (imput(Teter the value of final teliffication fate 1.2"))
 to intlinguity taken the value of fine # "15
 sto Clast input Timer the value of heray (nofficient to sea");
 . The total intilication is given by:
 fy - 10 . I toplace with actual value of to
 for - 20; * toping with actual value of to
t = 10 * forther with actual value of t + fp= fc * t = ife = fr)/kh
 print ("The value of fotal bufiltration is:", tp)
  Cotor the value of pinel infiltration Sate 166
foter the value of Pinel infiltration sate 1.21.2
foter the value of line as
foter the value of Decay Coefficient e.asso.ess
Decaylor of Infil Infiltration is $11.76126126126127
 ~ Q2
 . Calculation of Year precipitation by Holisep's solygon without
 . The value of precipitation at tach station to
 pt - float(input("feter the value of caseful at Casesus 1 1.125")) # the final to bardle decimal values
p2 - Goat(input("Inter the value of rainfall at Status 2: 125"))
p3 - Goat(input("Inter the value of rainfall at Status 22: 225"))
p4 - Heat(input("Inter the value of rainfall at Status 31: 225"))
 pb - float(input("Enter the value of calefall at Station # 5.40"1)
 Marya for each station
 Ale float (input ("Enter the value of Catcheon Area for catcheon station 1.25")) = Change int to float to accept decimal values A2- (inat(input) "Enter the value of Catcheon Area for categorics (tap(in 2.30"))
 A) . float (input ("Inter the value of Catchnest Area for category Matica") to"))
 Ad- float(poput) finter the value of fatchernt hera for cologouge stafum affa ))
 Abs float input (Tates the value of Catchent Area for colorance station be:
 the total catchment area . At . At . At . As
 print("the total catcheept area is", He total catcheest area)
 A.A1 . A2 . At . A4. A5
 print ("The value of Total Catcheent area is:", A)
 # Bunoff Value
 # the school shall be miltiplied by the coefficient See to cater scale effects
 Munoff volume
 We (61" Ale 62" Ale 61" Ale 64 "Ale 64" Ale 65" Ale 65" Ale 4 Tour had a type here. All should be Al
print ("the randt values from the given catchment in.", V)
 # Mean Precipitation
p + (p1 * A1 + p2 * A2 + p3 * A3 + p4 * A1 + p5 * A5) / A
print ("The value of Bean Precipitation is", (1)
 Te: (other the value of cainfall of Station 1/1.3751.125
      inter the value of calutall at Station 2:2.1752.175
      Inter the value of rainfall at Station 1:1.2251.225
      Loter the value of rainfall at Station 4.4.2754.275
      Inter the value of rainfall at Station 5.5 1255 175
      Inter the value of Catchment Area for raingauge station 1 2525
       Inter the value of Catchest Area for categoige station 2 late
      Inter the value of Catcheent Area for categoing statton 3 1030
      Enter the value of Catchment Area for raingauge station 4 1018
      Inter the value of Catchment Acra for raingauge station 5:55
      the total catcheest area is 75.0
      the value of Total Catcheent area is; 100,0
      the runoff volume from the given catcheent is: 648750.0
      the value of Mean Precipitation is 2.5%
~ Q3
scalculation of Mean precipitation by Isobytel Method
withe value of precipitation at tack station i
plaint(input('Inter the value of rainfall at Matter 1:14"))
Ole int(input("Fitter the value of rainfall at Station 2:12"))
```

```
Distorcioquit ("Inter the value of rainfall at Station 1:10"))
 pi-intriopol( 'Inter the value of califall at Station 4:8"))
 p5= int(reput("Inter the value of rainfall at Station 5:6"))
 projects report ("Inter the calme of caletall at Station 6.4"))
 P's intrigual (Inter the objector rainfall at Station 7:2"))
 parts compute Tenter the value of caintail at Station 8:0"))
 I Acres for each statue
 Al- intimpod("Inter the value of (atchment Aces for raingage station 1:90"))
 A2* int(input) (Inter the value of Catcheent Area for raingauge station 2:150°))
 Ale introput("Inter the value of (atchment Acea for raingauge station 3.125"))
 44. Intemput("Enter the value of Catchnest Area for reingauge station 4:140"))
 A5+ intimpot(" fater the value of Catchment area for raingauge station 5.85"))
Ace intelligent ("Inter the value of (alcheent Area for raingeage station 6:40"))
AZ= intringul('Inter the value of Cabibeet Area for religange station 7:20"))
# The total catcherest area is
A- A1. A2. A1. A4. A5. A1. A7.
print : The value of Istal Catchwent area is 17,4)
* Mean Provipitation &
B*((p1*p2) *A1/2 * (p2*p3)*A2/2* (p3:p4)*A3/2* (p4*p5)* A4/2 * (p5*p6)*A5/2 * (p6*p7)*A6/2 * (p7*p8)*A7/2)/A
gethe ("the value of Man Proceputation is . . p)
 toter the value of calmfall at Station 1:1414 inter the value of calmfall At Station 2:1212
      inter the value of califold at station 3:1010
     inter the value of capitall at down on diss
     Enter the value of rainfall at $lation 5:66
Enter the value of rainfall at Station/6:4:
     Enter the value of ratefull at Station-Jell
     Later the value of cainfall at Staffon # 50
     Later the value of Catcheon! Area for egilipage, station 1:9090
     Fotor the value of Catchernt Aces for raincaple station 2:140140 [oter the value of Catchernt Aces for raincaple 5 lation 1:125125 [oter the value of Catchernt Aces for reingage station 4:140140]
                                                                      1/2 CLONE
     inter the value of Catefornit Ares for rates Augustation 5:8585
     fater the value of Catchment Area for raingeage station 6:4040
     Enter the value or Catchment Area for reingauge staylon-7,2020
     The value of Total Catchment area is : 640
     the value of Mean Precipitation Is: 5-29818359375
```