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| **Assignment:class 9** |
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# Python3 program to find floor(sqrt(x)  
  
# Returns floor of square root of x  
def floorSqrt(x):  
 # Base cases  
 if (x == 0 or x == 1):  
 return x  
  
 # Starting from 1, try all numbers until  
 # i\*i is greater than or equal to x.  
 i = 1;  
 result = 1  
 while (result <= x):  
 i += 1  
 result = i \* i  
  
 return i - 1  
  
  
# Driver Code  
x = 33  
print(floorSqrt(x))

* Output : 5

02.

Given an integer array nums of length n, you want to create an array ans of length 2n where ans[i] == nums[i] and ans[i + n] == nums[i] for 0 <= i < n (0-indexed).

Specifically, ans is the concatenation of two nums arrays.

Ans: nums = []

n = int(input("Enter the list size "))

for i in range(0, n):

    print("For index", i )

    item = int(input("Enter item in list according to index:" ))

    nums.append(item)

print("Input: nums= ", nums)

print("Output: ans=", nums+nums)

03. Given an array nums. We define a running sum of an array as runningSum[i] = sum(nums[0]…nums[i]). Return the running sum of nums.

Ans: **def** solve(prices):  
 n=len(nums)  
 rs=[nums[0]]  
  
 **for** i **in** range(1,n):  
 nums[i]+=nums[i-1]  
 rs.append(nums[i])  
 **return** rs  
  
nums = [8,3,6,2,1,4,5]  
print(solve(nums))

* Input: [8,3,6,2,1,4,5]

Output : [8, 11, 17, 19, 20, 24, 29]