

1. Write a program to convert specified days into years, weeks and days.  
Take  
user input.  
Note: Ignore leap year.
2. Write a Python program to input basic salary of an employee and calculate its Gross salary according to following:  
Basic Salary  $\leq$  10000 : HRA = 20%, DA = 80%  
Basic Salary  $\leq$  20000 : HRA = 30%, DA = 90%  
Basic Salary  $>$  20000 : HRA = 35%, DA = 95%
3. Write a Python program to input electricity unit charges and calculate total electricity bill according to the given condition:  
For first 50 units Rs. 0.50/unit  
For next 100 units Rs. 0.75/unit  
For next 100 units Rs. 1.25/unit  
For unit above 250 Rs. 1.50/unit  
An additional surcharge of 17% is added to the bill
4. Write a Python program to print the given number patterns.  
1  
2 2  
3 3 3  
4 4 4 4  
5 5 5 5 5
5. Write a Python program to calculate product of digits of a number. Read value of n from user.
6. Create a list of elements like: `x = [45, 67, 12, 'Hello', 23.45, 'World']` and perform following operations
  1. Extract only string values from this list.
  2. Create a new list with strings in upper case.

3. Find the addition of integer values
  4. Check that the value 56 is present in it or not.
  5. Print the list in reverse order.
  6. Delete the string 'Hello' from it.
  7. Insert a new value of 36 at 5th position in list.
  8. Count total number of elements in list now.
  9. Extract the values from 2nd index to 5th index.
  10. Append [34, 'Pune'] to this list.
  11. Delete the last element from list.
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7. Create a tuple of elements with 5 float values in it and perform following operations.
    1. Print the data in sorted manner.
    2. Check to see that the element 50 is present in it.
    3. Convert this tuple in set.
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8. Create a dictionary of elements: {'a': 'apple', 'b': 'ball', 'c': 'cat', 'd': 'doll', 'k': 'king'} and perform following operations.
    1. Access the data at key 'k'.
    2. Add a new values 'z': 'zebra'
    3. Replace the contents of 'd' as 'dog'
    4. Print all the values from this dictionary.
    5. Find the length of this dictionary.
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9. Write a program to find the second largest element in a list.
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10. This is a list of some metallic elements.  
metals = [ 'silver','gold', ... ]  
Make a new list that is almost identical to the metals list: the new contains the same items, in the same order, except that it does NOT contain the item 'copper'.