

Python Practice question as per the interview requirement

1. Write a program to check if a given number is an **Armstrong** number. ($153=1**3+5**3+3**3$)
2. Write a program to check if the given string is a **palindrome**. (madam=madam)
3. Write a program to get the **Fibonacci series**. (0,1,1,2,3,5,8,13,21.....)
4. Write a program to find the **factorial** of a given number.
5. Write a program to find how many **vowels and consonants** are present in strings.
6. Write a program to create **calculator** through functions.
7. Write a program to check given year is **leap year or not**.
8. Write a program to check if the given strings are **anagram or not**. (python=typhon).
9. Write a program to check given number is **Harshad number/ Niven number** or not. (A Harshad number (also known as a Niven number) **is a positive integer** that is divisible by the sum of its digits. Example – $18\%(1+8)==0$)
10. Write a program to check given number is **neon number** or not. (A neon number is a number where the sum of digits of square of the number is equal to the number. Example- digit = 9 square of digit $9*9=81$ sum of square digit $8+1=9$)
11. Write a program to check given number is **Peterson number or not**. (A number is said to be a Peterson number if the sum of factorials of each digit of the number is equal to the number itself. Example – $n=145$, sum of $1!+4!+5!=145$)
12. Write a program to check given number is **spy no or not**. (A number is said to be a Spy number if the sum of all the digits is equal to the product of all digits. Examples: Input : 1412. $1+4+1+2 == 1*4*1*2$ Output : Spy Number.)
13. Write a program to check given number is **sunny no or not**. (It is a positive number where the sum of its digits equals the number itself when those digits are squared. Example, 19 is a sunny number because $1**2 + 9**2 = 82$, now $8+2==1+9$.)