

PYTHON ASSIGNMENT 1 PROGRAMS

- 1) Python Program to check whether the given number is an Armstrong Number.
- 2) Python Program for generating Armstrong numbers in a given range.
- 3) Python Program for checking whether a number is palindrome or not.
- 4) Python program to generate palindrome numbers
- 5) Python Program for checking whether the given number is a Duck number or not.
- 6) Python program for generating duck numbers
- 7) Python program for checking whether a number is a perfect number or not and displaying the factors of that number
- 8) Python Program for generating perfect number with list
- 9) Python Program to check whether a number is prime or not
- 10) Python Program to print prime numbers in a given range
- 11) Python program to print Krishnamurthy number in a given range

(A number is said to be Krishnamurthy number if the sum of the factorials of digits of that number is equal to that number itself)

Sample Input: 167

Sample Output: - 167, is a Krishnamurthy Number

Sample Input: 145

Sample Output: - 145, is a Krishnamurthy Number

- 12) Python Program to add number till a negative number is given as an input
- 13) Python program for printing the binary equivalent of a number in stars
- 14) Python program for printing the binary equivalent of a number in stars in vertical manner
- 15) Python program to print first letter of a sentence.
- 16) Python program to find hcf and lcm of the given numbers
- 17) Program for checking whether a given equation is balanced properly with brackets or not.
- 18) Python program to print the following pattern

for n=6

```
      *
     * *
    * * *
   * * * *
  * * * *
 * * * *
* * * *
 * * * *
  * * * *
   * * * *
    * * * *
     * * *
      * *
       *
```

19) Python program to print the following pattern

for n=6

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

20) Python Program for printing the following pattern

for n=5

```
1
2 1
3 2 1
4 3 2 1
5 4 3 2 1
```

21) Python Program for printing the following pattern

for n=5

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

22) Python Program for printing the following pattern

for n =5

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

23) Python Program for printing the following pattern

for n=5

```
1
12
123
1234
12345
```

- 24) Python Program to print the grade of a student on the basis of his marks
- 25) Python Program to check whether a given year is a leap year or not
- 26) Python Program for implementing linear Queues
- 27) Python Program to print the following pattern

For n=5

```

      *
    ***
  *****
*****
*****
*       *
***     ***
*****   *****
***     ***
*       *
*****
*****
*****
***
*

```

- 28) Python Program to print the following series 1,11,31,61,101,.....
- 29) Python Program to implement Stacks and Queues
- 30) Python Program to implement the stack

PYTHON ASSIGNMENT 2 PROGRAMS

- 31) Python program for finding the sum of the digit of a number
- 32) Python Program for printing sum of first n natural numbers
- 33) Python Program to print sum of odd and even numbers of 1st natural numbers
- 34) Python Program for printing sum of squares first n natural numbers
- 35) Python Program to print the table of a number
- 36) Python Program for printing the following pattern

For n=5

```

  1
 22
333
4444
55555

```

- 37) Python Program to check whether a list is having all unique elements or not
- 38) Python program to convert binary to decimal number

39) Python program to convert decimal to binary number

40) Python program to remove duplicates from a string

41) Python program to displaying outer boundary of a triangle by stars

For n =8

```

      *
     * *
    *  *
   *   *
  *    *
 *     *
*      *
*      *
*****
```

42) Python program for finding the palindrome words from a given string.

Sample Input: - "Hi mom and dad"

Sample Output: - mom

Dad

43) Python program for checking prime palindrome number

44) Python program for generating prime palindrome numbers in a given limit

45) Python program to print the occurrence of all the characters in a given string

Sample Input: - "India"

Sample Output: -

Character	occurrence
I	2
N	1
D	1
A	1

46) Python program to print the occurrence of all word in a given string

Sample Input: - "Ram is good boy. Ram is doing well"

Sample Output: -

Word	occurrence
Ram	2
is	2
good	1
boy	1

doing	1
well	1

47) Python program to find equivalent binary number of a decimal number using recursion

48) Python program to build a calculator using functions

49) Python program for checking special number

Sample Input: - 91

Sample Output: - $9+1=10$, $1+0=1$

: - 91 is a special number

50) Python program for printing special number in a given range

51) Python program to find factorial of a number using recursion

52) Python program for checking Neon number.

(A number is said to 'Neon', if sum of the digits of a square is equal to the number itself.)

Sample Input: - 9

Sample Output: $9*9=81$, $8+1=9$

: 9 is a Neon Number

53) Python program to accept a number and display the new number after removing all zeros.

Input: 54000270

Output: 5427

54) Python program to check whether the number is twisted or not.

(A prime number is said to be 'Twisted Prime', if the new number obtained after reversing the digit is also a prime number.)

Sample Input: 167

Sample Output: - 761 is a prime number

167 is a twisted prime number

55) Python program for checking Unique Number.

(A number is said to be Unique Number if digits of a number are not repeated.)

Sample Input: 167

Sample Output: - 167, is a Unique Number

Sample Input: 11587

Sample Output: - 11587, is not a Unique Number

56) Python program to displaying outer boundary of a triangle by stars
for n =5

57) Python program to check automorphic number

Sample Input: 5

Sample Output: - 25

Sample Input: 25.

Sample Output: -625

- 58) Python program to generate automorphic number with in a given range.
- 59) Python program to run DICE simulator
- 60) Python program to display sum of odd and even numbers with in given range.

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