

Q.1) Write a Python function to check whether a string is a pangram or not.

Note : Pangrams are words or sentences containing every letter of the alphabet at least

once.

For example : "The quick brown fox jumps over the lazy dog"

→

```
def is_pangram(s):
    s = s.lower()
    letters = set()
    for ch in s:
        if ch.isalpha():
            letters.add(ch)
    return len(letters) == 26
stu = "The quick brown fox jumps over the lazy dog"
if is_pangram(stu):
    print("String is a pangram")
else:
    print("String is not a pangram")
```

Q.2) Write a Python program to calculate the sum of the digits in an integer.

→

```
num=(input("Enter Digits: "))
sum_dig=sum(int(i) for i in num if i.isdigit())
print(sum_dig)
```

Q.3) Write a Python program to sort three integers without using conditional statements and

loops. [u can use built in functions for this]

→

```
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
c = int(input("Enter third number: "))
sorted_nums = sorted([a, b, c])
print("Sorted order:", sorted_nums)
```

Q.4) Write a Python function to check whether a number is perfect or not.

According to Wikipedia : In number theory, a perfect number is a positive integer that is

equal to the sum of its proper positive divisors, that is, the sum of its positive divisors

excluding the number itself (also known as its aliquot sum). Equivalently, a perfect

number is a number that is half the sum of all of its positive divisors (including itself).

Example : The first perfect number is 6, because 1, 2, and 3 are its proper positive

divisors, and $1 + 2 + 3 = 6$. Equivalently, the number 6 is equal to half the sum of all its

positive divisors: $(1 + 2 + 3 + 6) / 2 = 6$. The next perfect number is $28 = 1 + 2 + 4 + 7 +$

14. This is followed by the perfect numbers 496 and 8128.

→