20 – PROGRAMS

1.To check the given number is Even or Odd program.

```python
# 1.Even or Odd
n=int(input())
if n%2==0:
    print("Even")
else:
    print("Odd")
```

2.To check the given number is positive or negative or zero program.

```python
# 2.Positive Or Negative or Zero
n=int(input())
if n>0:
    print("Positive")
elif n<0:
    print("Negative")
else:
    print("Zero")
```

3.To check the given number is prime or not.

```python
#3.Prime or not
n=int(input())
if n <= 1:
    print("Not a prime number")
else:
    count = 0
    for i in range(1, n + 1):
        if n % i == 0:
            count += 1

    if count == 2:
        print("Prime number")
    else:
        print("Not a prime number")
```

4.To check the given number is factorial or not.

```
#4.Factorial
n= int(input())
fact = 1
i = 1
while fact < n:
    i = i + 1
    fact = fact * i

if fact == n:
    print("factorial number")
else:
    print("not a factorial number")
```

5.To check the given number is palindrome or not.

```
main.py
1  text = input()
2  if text == text[::-1]:
3      print("Palindrome")
4  else:
5      print("Not Palindrome")
6
```

6.to check the given number is Armstrong or not.

```
main.py
1   n = int(input())
2   sum = 0
3   temp = n
4   while temp > 0:
5       digit = temp % 10
6       sum += digit ** 3
7       temp //= 10
8
9   if n == sum:
10      print("Armstrong number")
11  else:
12      print("Not Armstrong number")
13
14
```

7.write a program to reverse a string.

main.py

```python
text = input()
reversed_text = text[::-1]
print("Reversed string:", reversed_text)
```

8.To check the given number is pronic or not.

main.py

```python
n= int(input())
found = 0
for i in range(n):
    if i * (i + 1) == n:
        found = 1

if found == 1:
    print(n, "is a Pronic number")
else:
    print(n, "is not a Pronic number")
```

9.to check the given number is perfect or not.

main.py

```python
n= int(input())

sum = 0

for i in range(1, n):
    if n % i == 0:
        sum = sum + i

if sum == n:
    print(n, "is a Perfect number")
else:
    print(n, "is not a Perfect number")
```

10. write a program for Fibonacci series.

```python
n = int(input())

a = 0
b = 1

for i in range(n):
    print(a, end=" ")
    c = a + b
    a = b
    b = c
```

11. write a program to print sum of two numbers.

```python
a = int(input())
b = int(input())
sum = a + b
print("Sum is:", sum)
```

12. write a program to Find Largest of Two Numbers.

```python
a = int(input())
b = int(input())
if a > b:
    print("Largest is:", a)
else:
    print("Largest is:", b)
```

13. write a program to Find Sum of First N Natural Numbers.

```python
n = int(input())
sum = 0
for i in range(1, n+1):
    sum += i
print("Sum =", sum)
```

14. Program to Swap Two Numbers Without Temp Variable.

```python
a = int(input())
b = int(input())
a, b = b, a
print("After swapping: a =", a, "b =", b)
```

15. program to print Table of a Number .

```python
n = int(input())
for i in range(1, 11):
    print(n, "x", i, "=", n*i)
```

16.write a program to Count Vowels in a String.

```python
text=input()
count = 0
for ch in text.lower():
    if ch in 'aeiou':
        count += 1
print("Vowels:", count)
```

17. Write a program to Find Minimum and Maximum in a List.

```python
n = list(map(int, input().split()))
print("Minimum =", min(n))
print("Maximum =", max(n))
```

18. Write a program to perform arithmetic operations.

```python
a = int(input())
b = int(input())
print("Sum:", a + b)
print("Difference:", a - b)
print("Product:", a * b)
print("Quotient:", a / b)
```

19. Write a program to find Largest of Two Numbers.

```python
a, b = map(int, input().split())
print("Largest =", a if a > b else b)
```

20. Write a program to print Square of a Number.

```python
n = int(input())
print("Square =", n**2)
```