Internships

Tasks (20/02/2023)

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1. Empty list takes values from the users: -

```
list1 = []
n = int(input("Enter a nth number:- "))
for i in range(n):
    val = int(input(f"Enter a number {i+1}:- "))
    list1.append(val)
print(list1)
```

2. Reverse Number: -

```
num = int(input("Enter a number:- "))

# method 1
# print("Real number is ",str(num))
# print("reverse number is ",str(num)[::-1])

#method 2
rev = 0
rem = 0
temp = num
while(num!=0):
    rem = num%10
    rev = rev*10+rem
    num = num//10
print("Real number is ",temp)
print("reverse number is ",rev)
```

3. Armstrong number: -

```
num = int(input("Enter a number:- "))

sum = 0
rem = 0
temp = num
temp1 = num
count = 0
while temp1 !=0:
    count+=1
    temp1//=10
print(count)
while(num!=0):
    rem = num%10
    sum = sum+(rem**count)
    num = num//10

if(temp == sum):
    print("Number is armstrong")
else:
    print("Number is not armstrong")
```

4. Fibonacci series: -

```
num = int(input("Enter a nth number of fibonnaci serise:- "))
f1 = 0
f2 = 1
nxt = 0
for i in range(num):
    if i == 0:
        print("0, ",end="")
    else:
        f1 = f2
        f2 = nxt
        nxt = f1+f2
        print(nxt,", ",end="")
```

5. Palindrome number: -

```
num = int(input("Enter a number:- "))


# if num == num[::-1]:
#     print("Number is palindrome")
# else:
#     print("Number is not palindrome")


rev = 0
rem = 0
temp = num
while(num!=0):
    rem = num%10
    rev = rev*10+rem
    num = num//10
if(temp == rev):
    print("Number is palindrome")
else:
    print("Number is not palindrome")
```

6. LCM: -

```
num1 = int(input("Enter a number 1:- "))
num2 = int(input("Enter a number 2:- "))
lcm = 0
if num1 > num2:
    greater = num1
elif num2 > num1:
    greater = num2
while True:
    if(greater%num1==0 and greater%num2==0):
        lcm = greater
        break
    greater+=1

print(lcm)
```

7. HCF: -

```
num1 = int(input("Enter a number 1:- "))
num2 = int(input("Enter a number 2:- "))
lcm = 0
if num1 > num2:
    max = num1
    min = num2
elif num2 > num1:
    max = num2
    min = num1

hcf = 0
for i in range(1,min+1):
    if(num1%i == 0 and num2%i==0):
        hcf = i


print(hcf)
```