

1. Accept a number and check whether it is palindrome or not.

In [90]:

```
a = int(input("Enter number: "))
rev = 0
b=a
while(a>0):
    rev = (rev*10)+a%10
    a=a//10
if(b==rev):
    print("Palindrome Number")
else:
    print("Not Palindrome")
```

Enter number: 101
Palindrome Number

2. Write a program to display all the numbers which are divisible by 11 but not by 2 between 100 and 500.

In [2]:

```
a = int(input("Enter a number: "))
for a in range(100,500) :
    if a%11==0 and a%2!=0:
        print(a)
```

Enter a number: 101
121
143
165
187
209
231
253
275
297
319
341
363
385
407
429
451
473
495

3. Write a program to find the sum of the digits of a number accepted from user

In [3]:

```
a = input("Enter number: ")
sum=0
for i in a:
    sum= sum + int(i)

print(sum)
```

Enter number: 12345
15

4. Write a program to find the factorial of a number.

In [87]:

```
n = int(input("Enter any number: "))
fac = 1
while n>0:
    fac = fac*n
    n = n-1
print("factorial= ", fac)
```

Enter any number: 5
factorial= 120

5. Write a program to display the product of the digits of a number accepted from the user.

In [5]:

```
a = input("Enter number: ")
mul = 1
for i in a:
    mul = mul * int(i)

print(mul)
```

Enter number: 123
6

6. Calculate the average of the number given in the list through loop. list1=[34,6,43,2,32,44,55,33,32]

In [25]:

```
list1= [34,6,43,2,32,44,55,33,32]
a = len(list1)
sum =0
for i in list1:
    sum = sum + i
avg = sum/a
print("The average of the number is:", avg)
```

The average of the number is: 31.22222222222222

7. Write a program swap the keys to values and values to keys of the given dictionary. Module = {'Data

Science':1,'Machine Learning':2, 'SQL':3, 'Big Data':4} Output: {1:'Data Science',2:'Machine Learning', 3:'SQL', 4:'Big Data'}

In [22]:

```
dict = {'Data Science':1,'Machine Learning':2, 'SQL':3, 'Big Data':4}
dict = {value:key for key, value in dict.items()}
print(dict)
```

```
{1: 'Data Science', 2: 'Machine Learning', 3: 'SQL', 4: 'Big Data'}
```

8. Write a program to extract the words from the given list which have their first character in uppercase. Days = ['Monday', 'tuesday', 'friday', 'Sunday', 'Saturday'] Output: ['Monday', 'Sunday', 'Saturday']

In [79]:

```
Days = ['Monday', 'tuesday', 'friday', 'Sunday', 'Saturday']
upper_case_words = []
for i in Days:
    if i[0].isupper():
        upper_case_words.append(i)
print(upper_case_words)
```

```
['Monday', 'Sunday', 'Saturday']
```

9. Write a program to count all the elements from wrong text but it should not consider space and vowels
wrong=""But soft what light through yonder window breaks It is the east and Juliet is the sun Arise fair sun and kill the envious moon Who is already sick and pale with grief""

In [96]:

```
s the east and Juliet is the sun Arise fair sun and kill the envious moon Who is already si
nt)
```

The number of elements in the wrong text is 83

10. Remove duplicates from the given list num2 using loop. num2=
[1,2,3,41,3,5,4,56,4,56,4,4,36,6,66,6,645,3,3,5,6,8]

In [17]:

```
num2 = [1,2,3,41,3,5,4,56,4,56,4,4,36,6,66,6,645,3,3,5,6,8]
new_list = []
for i in num2:
    if i not in new_list:
        new_list.append(i)
print(new_list)
```

[1, 2, 3, 41, 5, 4, 56, 36, 6, 66, 645, 8]

11. Write a program to check whether two numbers are amicable or not (take the input from the user).

In [69]:

```
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
sum = 0
sum1 = 0
for i in range(1,int(a/2)+1):
    if a%i == 0:
        sum = sum + i
for i in range(1,int(b/2)+1):
    if b%i == 0:
        sum1 = sum1 + i
if sum == b and sum1 == a:
    print(a, "and", b, "are amicable number")
else:
    print(a, "and", b, "are not amicable number")
```

Enter first number: 254
Enter second number: 245
254 and 245 are not amicable number

12. Write a program to check whether a number is prime or not (take the input from user)

In [34]:

```
n = int(input("Enter any number: "))
if n>1:
    for i in range(2,n):
        if(n%i)==0:
            print(n, "is not prime number")
            break
    else:
        print(n, "is prime number")
```

Enter any number: 17
17 is prime number

13. Reverse string using a for loop (take the input from user).

In [70]:

```
def reverse(str):
    reversed_str = ""
    for i in str:
        reversed_str = i+ reversed_str
    print("reversed_str is:", reversed_str)
str = input("Enter a string: ")
print("entered str is :", str)
reverse(str)
```

Enter a string: ram
entered str is : ram
reversed_str is: mar

14. Write a program for generating a fibonacci series starting with 0 and 1 for the next 10 values using a while loop.

In [88]:

```
n = int(input("Enter number: "))
x=0
y=1
z=0
while z<=n:
    print(z)
    x=y
    y=z
    z=x+y
```

Enter number: 10
0
1
1
2
3
5
8

15. Write a code to print table of 5 using assignment operand +=.(using while)

In [71]:

```
n = int(input("Enter number to find table: "))
i = 1
while i<=10:
    print(f"{n}x{i}={n*i}")
    i += 1
```

Enter number to find table: 5

5x1=5

5x2=10

5x3=15

5x4=20

5x5=25

5x6=30

5x7=35

5x8=40

5x9=45

5x10=50