In [1]:

```
for i in range(1,4):
    if (i % 4 == 0):
        print(i)
```

In [2]:

```
print("Function (+,-,*,/)")
x = input()

print("Enter operand a:")
a = int(input())

print("Enter operand b:")
b = int(input())

print("Operation result: ")
if (x == '+'):
    print(a+b)
elif (x == '-'):
    print(a-b)
elif (x == "*"):
    print(a*b)
elif (x == '/'):
    print(a/b)
```

```
Function (+,-,*,/)
+
Enter operand a:
2
Enter operand b:
3
Operation result:
5
```

In [3]:

```
def is_palindrome(s):
    return s == s[::-1]

x = input()
print(is_palindrome(x))
```

```
malayalam
True
```

In [4]:

```
num = [6, 3, 27, 5, 4, 9]

def add_elements(x):
    total = 0
    for i in x:
        total += i
    print(total)

def count_divisible_three(x):
    total_div_count = 0
    for i in x:
        if (i % 3 == 0):
            total_div_count += 1
    print(total_div_count)

add_elements(num)
count_divisible_three(num)
```

```
54
4
```

In [17]:

```
def total_student_marks(x):
    total = 0
    for i in x:
        total += i
    return total

def average_student_marks():
    return total_student_marks(marks_tuple) / len(marks_tuple)

marks_tuple = [4, 5, 6, 2, 1, 3]

print("1. Calculate total marks")
print("2. Calculate average marks")
choice = int(input())

if (choice == 1):
    print("Total marks: " + str(total_student_marks(marks_tuple)))
elif (choice == 2):
    print("Average marks: " + str(average_student_marks()))
else:
    print("Invalid option")
```

```
1. Calculate total marks
2. Calculate average marks
2
Average marks: 3.5
```

In [32]:

```
set_one = set(input("Enter string one: "))
set_two = set(input("Enter string two: "))

def print_common_letters():
    letters = list(set_one & set_two)
    print("Common letters: " + str(letters))

def print_in_first_not_second():
    letters = list(set_one - set_two)
    print("In First, not second: " + str(letters))

def print_all():
    letters = [set_one, set_two]
    print("All letters: " + str(letters))

print_common_letters()
print_in_first_not_second()
print_all()
```

```
Enter string one: goa
Enter string two: aloha
Common letters: ['o', 'a']
In First, not second: ['g']
All letters: [{'o', 'g', 'a'}, {'h', 'l', 'o', 'a'}]
```

In [37]:

```
emp_dict = {
  "name": "Akash Purohit",
  "desc": "Senior Developer II",
  "age": 32
}
print("Input: " + str(emp_dict))

desc_update = {"desc": "Senior Developer III"}
emp_dict.update(desc_update)
print("After update: " + str(emp_dict))

emp_dict.popitem()
print("After delete: " + str(emp_dict))

print("Print a key-value: " + str(emp_dict["name"]))
```

```
Input: {'name': 'Akash Purohit', 'desc': 'Senior Developer II', 'age': 32}
After update: {'name': 'Akash Purohit', 'desc': 'Senior Developer III', 'age': 32}
After delete: {'name': 'Akash Purohit', 'desc': 'Senior Developer III'}
Print a key-value: Akash Purohit
```

In [ ]: