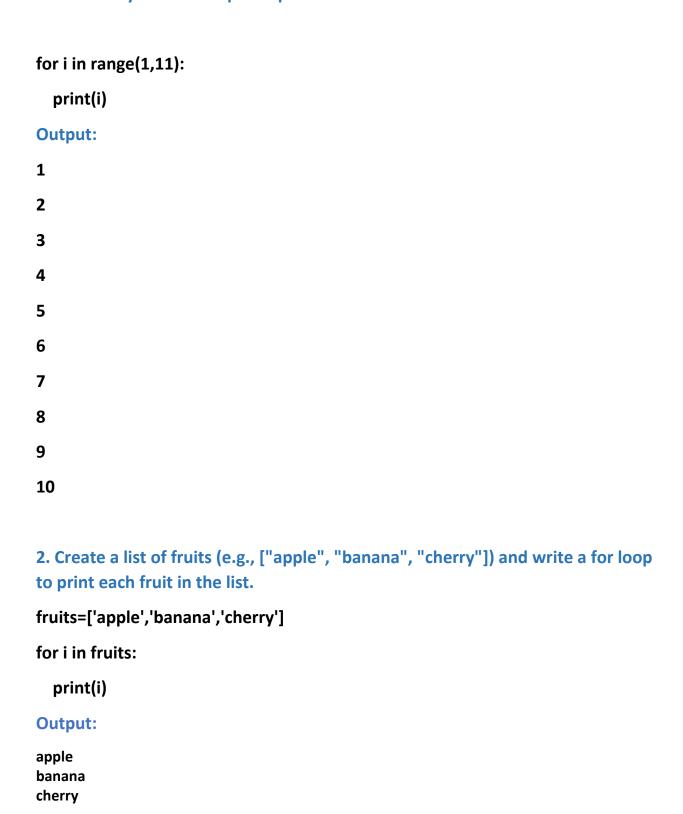
## **ASSIGNMENT - 2**

1. Write a Python for loop that prints the numbers from 1 to 10.



3. Write a Python program that calculates the sum of all even numbers from 1 to 50 using a for loop.

```
sum=0
for i in range(1,50):
  if(i%2==0):
   sum=sum+i
print(sum)
output:
600
4. Create a list of integers, and using a for loop, find and print the largest
number in the list.
max=0
list=[1,23,11,6,43,25]
for i in list:
  if i>max:
    max=i
print(max)
output:
```

43

5. Write a Python program that uses a for loop to find and print all the prime numbers between 1 and 100. A prime number is a positive integer greater than 1 that has no positive integer divisors other than 1 and itself.

```
for i in range(1,100):
    for j in range(2,i):
        if i%j==0:
        break
    else:
        print(i,end=' ')

output:
1 2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97
```

6. Write a Python program that takes a list of dictionaries, where each dictionary represents a person with keys "name" and "age." Find and print the average age of all the people in the list.

```
def average_age(people):
   total_age = 0
   count = 0
   for person in people:
      total_age =total_age+ person["age"]
      count =count+1
   if count == 0:
      return "No people in the list"
```

```
else:
    return total_age / count

people = [
    {"name": "arun", "age": 25},
    {"name": "kumar", "age": 30},
    {"name": "bright", "age": 22},
]

print(average_age(people))

output:
    25.6666666666668
```

7. Create a dictionary representing a simple inventory system for a store. Implement a function that allows you to update the quantity of items in the inventory by specifying the item name and the new quantity.

```
inventory = {
    "apple": 50,
    "banana": 30,
    "orange": 20,
    "grape": 100,
    "strawberry": 50,
}

def update_inventory(item_name, new_quantity):
    if item_name in inventory:
```

```
inventory[item_name] = new_quantity
else:
    print(f"Error: Item '{item_name}' not found in the inventory.")

update_inventory("apple", 60)

update_inventory("cherry", 70)

print(inventory)

output:

Error: Item 'cherry' not found in the inventory.
{'apple': 60, 'banana': 30, 'orange': 20, 'grape': 100, 'strawberry': 50}
```