In [2]:
```
#question no.1
```

In [18]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
print(" Students Dictionary:", students)
```

```
 Students Dictionary: {'Pratiksha': 85, 'Pranav': 78, 'Mahi': 92, 'Aravi': 76, 'S
hree': 89}
```

In [ ]:
```
question no.2
```

In [ ]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
print(" Marks of Mahi:", students["Mahi"])
```

In [ ]:
```
question no.3
```

In [27]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
students["Adhira"]=80
print("adding Adhira",students)
```

```
adding Adhira {'Pratiksha': 85, 'Pranav': 78, 'Mahi': 92, 'Aravi': 76, 'Shree': 8
9, 'Adhira': 80}
```

In [ ]:
```
question no.4
```

In [ ]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
students["Pratiksha"]=98
print("updating the value:",students)
```

In [ ]:
```
question no.5
```

In [17]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
```

```
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
students.pop("Mahi")
print("removing key-value:",students)
```

```
removing key-value: {'Pratiksha': 85, 'Pranav': 78, 'Aravi': 76, 'Shree': 89}
```

In [ ]:
```
question no.6
```

In [16]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
keys=students.keys()
print(keys)
```

```
dict_keys(['Pratiksha', 'Pranav', 'Mahi', 'Aravi', 'Shree'])
```

In [ ]:
```
question no.7
```

In [15]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
values=students.values()
print(values)
```

```
dict_values([85, 78, 92, 76, 89])
```

In [ ]:
```
question no.8
```

In [14]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
items=students.items()
print(items)
```

```
dict_items([('Pratiksha', 85), ('Pranav', 78), ('Mahi', 92), ('Aravi', 76), ('Shr
ee', 89)])
```

In [ ]:
```
question no.9
```

In [13]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
```

```
}
key_to_check = "Pranav"
if key_to_check in students:
    print(f" '{key_to_check}' exists in the dictionary.")
else:
    print(f" '{key_to_check}' does not exist in the dictionary.")
```

```
'Pranav' exists in the dictionary.
```

In [ ]:
```
question no.10
```

In [12]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
print(" Keys using loop:")
for key in students:
    print(key)
```

```
 Keys using loop:
Pratiksha
Pranav
Mahi
Aravi
Shree
```

In [ ]:
```
question no.11
```

In [11]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
print("Values using loop:")
for value in students.values():
    print(value)
```

```
Values using loop:
85
78
92
76
89
```

In [ ]:
```
question no.12
```

In [10]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89

}
more_students = {"Gouri": 88, "ganesh": 95}
```

```
students.update(more_students)
print("After merging:", students)
```

```
After merging: {'Pratiksha': 85, 'Pranav': 78, 'Mahi': 92, 'Aravi': 76, 'Shree':
89, 'Gouri': 88, 'ganesh': 95}
```

In [ ]:
```
question no.13
```

In [4]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
max_key = max(students, key=students.get)
print("Student with highest marks:", max_key, students[max_key])
```

```
Student with highest marks: Mahi 92
```

In [ ]:
```
question no.14
```

In [5]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
nested_dict = {
    "Student1": {"Name": "vishakha", "Marks": 91},
    "Student2": {"Name": "Jayashri", "Marks": 84}
}
print("Jayashri Marks:", nested_dict["Student1"]["Marks"])
```

```
Jayashri Marks: 91
```

In [ ]:
```
question no.15
```

In [6]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
    "Shree": 89
}
names = ["seeta", "geeta", "meeta"]
marks = [77, 85, 93]
combined_dict = dict(zip(names, marks))
print(" Combined dictionary from lists:", combined_dict)
```

```
Combined dictionary from lists: {'seeta': 77, 'geeta': 85, 'meeta': 93}
```

In [ ]:
```
question no.16
```

In [7]:
```
students = {
    "Pratiksha": 85,
    "Pranav": 78,
    "Mahi": 92,
    "Aravi": 76,
```

```
    "Shree": 89
}
keys_list = ["A", "B", "C"]
default_value = 0
dict_fromkeys = dict.fromkeys(keys_list, default_value)
print(" Dictionary fromkeys():", dict_fromkeys)
```

```
Dictionary fromkeys(): {'A': 0, 'B': 0, 'C': 0}
```

In [4]:
```
def hello_world():
    print("Hello, World!")
```

In [5]:
```
def greet_user(name):
    print(f"Hello, {name}! Welcome!")
```

In [ ]:

In [6]:
```
def sum_of_two_numbers():
    a = float(input("Enter first number: "))
    b = float(input("Enter second number: "))
    print("Sum:", a + b)
```

In [ ]:

In [7]:
```
def square(num):
    return num ** 2
```

In [ ]:

In [8]:
```
def check_even_odd(num):
    if num % 2 == 0:
        print(f"{num} is Even")
    else:
        print(f"{num} is Odd")
```

In [ ]:

In [ ]:
```
def factorial(n):
    fact = 1
    for i in range(1, n + 1):
        fact *= i
    return fact
```

In [ ]:

In [ ]:
```
def sum_of_list(lst):
    return sum(lst)
```

In [ ]:

In [2]:
```
def filter_even_numbers(lst):
    return [num for num in lst if num % 2 == 0]
```

In [ ]:

In [ ]:
```
def longer_string(str1, str2):
    return str1 if len(str1) > len(str2) else str2
```

In [ ]:
```

```

In [ ]:
```
def celsius_to_fahrenheit(c):
    return (c * 9/5) + 32
```

In [ ]:
```

```