

#ques 1. Write a Python function that takes a list of numbers as input and returns the sum of all even numbers in the list.

```
def sum_even_numbers(numbers):
    sum = 0
    for num in numbers:
        if num % 2 == 0:
            sum += num
    return sum
```

```
numbers=(2,3,4,5,7,9)
result=sum_even_numbers(numbers)
print(result)
```

↩ 6

#ques 2. Create a Python function that accepts a string and returns the reverse of that string.

```
def reverse_string(d):
    print (d[::-1])
```

```
d=("mansikundu")
s=reverse_string(d)
print()
```

↩ udnuk isnam

#ques 3. Implement a Python function that takes a list of integers and returns a new list containing the squares of each number

```
l=[3,4,5,6]
def sq(x):
    return x**2
list(map(sq,l))
```

↩ [9, 16, 25, 36]

#ques 4. Write a Python function that checks if a given number is prime or not from 1 to 200

```
l=range(1,201)
for i in l:
    if i>1:
        for j in range(2,i):
            if (i%j)==0:
                break
        else:
            print(i)
```

↩ 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
101
103
107
109
113
127
131

```

137
139
149
151
157
163
167
173
179
181
191
193
197
199

```

```

#ques 5. Create an iterator class in Python that generates the Fibonacci sequence up to a specified number of terms
temp=lambda n:n if n<=1 else temp(n-1)+temp(n-2)
[temp(i) for i in range(10)]

```

```

→ [0, 1, 1, 2, 3, 5, 8, 13, 21, 34]

```

```

#ques 6. Write a generator function in Python that yields the powers of 2 up to a given exponent
i=5
def power(n):
    for i in range(n+1):
        yield 2**i

```

```

#ques 8. Use a lambda function in Python to sort a list of tuples based on the second element of each tuple.
m=[("mansi"),("tuple"),("course")]
sorted(m,key=lambda x:x[1])

```

```

→ ['mansi', 'course', 'tuple']

```

```

#ques 9. Write a Python program that uses `map()` to convert a list of temperatures from Celsius to Fahrenheit
celsius=[23,45,67,89]
def sq(Celsius):
    return (Celsius*9/5)+32
list(map(sq,celsius))

```

```

→ [73.4, 113.0, 152.6, 192.2]

```

```

#ques 10. Create a Python program that uses `filter()` to remove all the vowels from a given string
l=["mansi kundu"]
list(filter(lambda x: x not in "aeiou",l[0]))

```

```

→ ['m', 'n', 's', ' ', 'k', 'n', 'd']

```

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