

1 . Write a Python function called square_numbers that takes a list of numbers as input and returns a new list containing the square of each number.

```
In [13]: def square_numbers(x,y,z):
          a=x**2
          b=y**2
          c=z**2
          return a,b,c
square=square_numbers(2,4,5)
print("square of x,y,z = ",square)

square of x,y,z =  (4, 16, 25)
```

2 . Write a Python function called find_even_numbers that takes a list of numbers as input and returns a new list containing only the even numbers from the input list.

```
In [17]: def even_numbers(number):
          even_numbers = []
          for i in number:
              if i%2==0:
                  even_numbers.append(i)
          return even_numbers

numbers = [1,2,3,4,5,6,7,8,9,10]

print("The Even Numbers = ",even_numbers(numbers))

The Even Numbers =  [2, 4, 6, 8, 10]
```

3 . Write a Python function called format_info that takes the following information as keyword arguments: name, age, city, country. The function should format the information into a string and return it.

```
In [22]: def format_info(**kwargs):
          print("my Name is ",kwargs["name"])
          print("i am ",kwargs["age"],"years old")
          print("my city is ",kwargs["city"])
          print("am from ",kwargs["country"])

          format_info(country="india",name="ajith",city="palakkad",age=26)

my Name is  ajith
i am  26 years old
my city is  palakkad
am from  india
```

4 . Squaring a number using a lambda function

```
In [24]: x=lambda a:a**2
          print("square of x = ",x(10))

square of x =  100
```

5 . A lambda function that checks if a number is even.

```
In [29]: number=int(input("Enter The Number = "))
          check=lambda:"Even Number" if number % 2 == 0 else "Odd Number"
          print(check())

Enter The Number = 10
Even Number
```

```
In [ ]:
```