Define a function that accepts a number and returns whether the number is even or odd.

```
def num(n):
    if n%2==0:
        print("number is even")
    else:
        print("number is odd")

num(7)
        number is odd

num(2)
        number is even
```

Define a function to create and print a list where the values are square of numbers between 1 and 30 (both included).

```
def square():
    l=list()

for i in range(1,31):
    l.append(i**2)
    print(1)

square()

[1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144, 169, 196, 225, 256, 289, 324, 361, 400, 441, 484, 529, 576, 6
```

Define a function, shut_down, that takes one parameter. Then, if the shut_down function receives a value equal to "yes", it should print "Shutting down". Alternatively, if vallue is equal to "no", then the function should print "Shutdown aborted". Finally, if shut_down gets anything other than those inputs, the function should print "Sorry".

```
def shut_down(s):
    if s=='yes':
        print("shutting down")
    elif s=='no':
        print("shutdown aborted")
    else:
        print("sorry")
    shut_down("yes")
        shutting down
```

Define a function called "by_three" that takes a parameter called number. If that number is divisible by 3, "by_three" should print the cube of the number. Otherwise, by_three should print False.

```
def by_three(n):
    if n%3==0:
        print(n*n*n)
    else:
        pass

by_three(9)
        729

by_three(5)
```

Define a function that takes a list and prints a new list with no duplicate elements given in the first list.

```
def unique_list(1):
    x = []
    for a in 1:
        if a not in x:
            x.append(a)
    print(x)

unique_list([3,4,5,3,4,5,7,9])
    [3, 4, 5, 7, 9]
```