Challenge 1

In [1]:

```python
strings=[]
for i in range(0,10):
    user=input("Enter a word -> ")
    strings.append(user)
for i in range(9,-1,-1):
    print(strings[i],end=" ")
```

```
Enter a word -> Praveen
Enter a word -> is
Enter a word -> a
Enter a word -> very
Enter a word -> good
Enter a word -> boy
Enter a word -> and
Enter a word -> a
Enter a word -> dedicated
Enter a word -> student
student dedicated a and  boy good very a is Praveen
```

Challenge 2

In [2]:

```python
print(strings[::-1])
```

```
['student', 'dedicated', 'a', 'and ', 'boy', 'good', 'very', 'a', 'is', 'Praveen']
```

Challenge 3

In [4]:

```python
alist=[]
for i in range(1,11):
    val=input("Enter a word -> ")
    alist.append(val)
```

```
Enter a word -> Praveen
Enter a word -> kumar
Enter a word -> is
Enter a word -> greatest
Enter a word -> of
Enter a word -> all
Enter a word -> time
Enter a word -> Praveen
Enter a word -> kumar
Enter a word -> greatest
```

Challenge 4

In [5]:

```python
blist=[]
for item in alist:
    if(alist.count(item)==1):
        blist.append(item)
print(blist)
```

```
['is', 'greatest ', 'of ', 'all', 'time', 'greatest']
```

Challenge 5

In [6]:

```python
blist.sort()
print(blist,"<- is sorted alphabetically")
```

```
['all', 'greatest', 'greatest ', 'is', 'of ', 'time'] <- is sorted alphabetically
```

Challenge 6

```
for i in range(len(blist)-1,-1,-1):
        print(blist.pop(i))
```

```
time
of
is
greatest
greatest
all
```

Challenge 7

```
for num in range(1500,2701,5): #Since step is 5 it gives numbers divisble by 5.
    if(num%7==0):
        print(num)
```

```
1505
1540
1575
1610
1645
1680
1715
1750
1785
1820
1855
1890
1925
1960
1995
2030
2065
2100
2135
2170
2205
2240
2275
2310
2345
2380
2415
2450
2485
2520
2555
2590
2625
2660
2695
```

Challenge 8

```
n=int(input("Enter the value of N= "))
for i in range(1,31):
    if(i%n!=0):
        print(i)
```

```
Enter the value of N= 5
1
2
3
4
6
7
8
9
11
12
13
14
16
17
18
19
21
22
23
24
26
27
28
29
```

Challenge 9

```
firstlist=[[1,2,3],[4,5,6],[7,8,9]]
secondlist=[[19,18,17],[16,15,14],[13,12,11]]
thirdlist=[[0,0,0],[0,0,0],[0,0,0]]
for i in range(3):
    for j in range(3):
        thirdlist[i][j]=firstlist[i][j]+secondlist[i][j]

for item in thirdlist:
    print(item)
```

```
[20, 20, 20]
[20, 20, 20]
[20, 20, 20]
```

Challenge 10

```python
mlist1=[]
ins=[]
mlist2=[]
for i in range(3):
    for j in range(3):
        val=int(input("Enter val = "))
        ins.append(val)
    mlist1.append(ins)
    ins=[]
for i in range(3):
    for j in range(3):
        val=int(input("Enter val = "))
        ins.append(val)
    mlist2.append(ins)
    ins=[]
```

```
Enter val = 1
Enter val = 2
Enter val = 3
Enter val = 4
Enter val = 5
Enter val = 6
Enter val = 7
Enter val = 8
Enter val = 9
Enter val = 19
Enter val = 18
Enter val = 17
Enter val = 16
Enter val = 15
Enter val = 14
Enter val = 13
Enter val = 12
Enter val = 11
```

```python
for item in mlist1:
    print(item)
for item in mlist2:
    print(item)
```

```
[1, 2, 3]
[4, 5, 6]
[7, 8, 9]
[19, 18, 17]
[16, 15, 14]
[13, 12, 11]
```