## **Combinations - I**

```
def combinations(n,r):
    res = []
    combinationsUtil(n,r,'',res,0,0)
    return res

def combinationsUtil(n,r,ssf,res,box,apples):
    if box==n:
        if r==apples:
            res.append(ssf)
        return

    combinationsUtil(n,r,ssf+'a',res,box+1,apples+1)
    combinationsUtil(n, r, ssf + '-', res, box + 1, apples)

print(combinations(10,5))
```

Here we are giving the apples the choice to either go in a box or not go into it.