1. **Binomial coefficient**

```
def fact(n):
    f = 1
    for i in range(1,n+1):
        f = f*i
    return f
n = int(input("enter the number n"))
r = int(input("enter the number r"))
a = n-r
res = fact(n)//(fact(r)*fact(a))
print(res)
```

2. **Word wrap**

```
def print_solution(solution, n):
    if solution[n] == 1:
        print(f"Line 1: words {solution[n]} to {n}")
    else:
        print_solution(solution, solution [n] - 1)
        print(f"Line {solution [n]}: words {solution[n]} to {n}")

def word_wrap(words, max_width):
    n = len(words)
    inf = float('inf')
    extras =[[0] * n for_ in range(n)]
    cost = [inf]* n
    solution = [0] * n
    for i in range(n):
        extras[i][i] = max_width words[i]
        for j in range(i + 1, n):
            extras[i][j] = extras[i][j - 1] - words[j] - 1
    for i in range(n-1, -1, -1):
        if extras[i][n-1] >= 0:
            cost[i] = 0
            solution[i] = n
        else:
            for j in range(n-1, i, -1):
                if extras[i][j - 1]>= 0 and cost[j] + (extras[i][j-1] ** 2) < cost[i]:
                    cost[i] = cost[j]+ extras[i][j-1] ** 2
                    solution[i] = j
    print_solution(solution, 0)

if_name__ == "_main_":
    words [3, 2,4,5]
    max_width = 6
    word_wrap(words,max_width)
```