

Remark 1: Solutions given are not exclusive. Any equivalent solution can be accepted provided that it solves the right problem.

Remark 2: The solutions may not use uncovered functions like the append function.

Exercise 1: 6pts

```
n:int=int(input("Enter n="))
if n<0:
    print("n should be ≥0")
else:
    arr:list[int]=[0]*(n*(n+1)//2)
    count[int]=0
    for i in range(n):
        for _ in range(i+1):
            arr[count]=i+1
            count+=1
    print(arr)
```

Exercise 2: 7pts

```
m: int = int(input("Enter m="))
if m ≤ 0:
    print("m should be >0")
else:
    items: list[str] = [""] * m
    count: int = 0
    total: int = 0
    while total < m:
        product: str = input(f"Enter item no {count+1}: ")
        price: int = int(input(f"Price of {product}? "))
        items[count] = product
        count += 1
        total += price
    if count-1<1:
        print("You can buy nothing")
    else:
        print("You can buy: ", end="")
        for i in range(count - 1):
            print(items[i], end="")
            if i < count - 2:
                print(", ", end="")
```

Exercise 3: 7pts

```
data:str=input("Enter the information: ")
infos:list[str]=data.split(",")
try:
    print(f"ID:{int(infos[0])}")
except:
    print("Invalid ID")
print(f"Name: {infos[1]}")
date:list[str]=infos[2].split("/")
print(f"Day of birth: {date[0]}")
print(f"Month of birth: {date[1]}")
print(f"Year of birth: {date[2]}")
```