Practical 4 :-

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Pattern 1 :-

In [13]:
```python
size = int(input("Enter size: "))
for i in range(size):
    # 65 is the ASCII value of 'A'
    ch = 65 + i
    for j in range(size - i):
        print(chr(ch), end = " ")
    print()
```

```
A A A A A
B B B B
C C C
D D
E
```

Pattern 2 :-

In [14]:
```python
size = int(input("Enter size: "))
c = 1
for i in range(size):
    for j in range(i + 1):
        print(c, end = " ")
        c += 1
    print()
```

```
1
2 3
4 5 6
7 8 9 10
11 12 13 14 15
```

Pattern 3 :-

In [16]:
```python
size = int(input("Enter size: "))
for i in range(size):
    for j in range(size):
        if i%2 == 0 and j%2 != 0:
            print(" ", end = " ")
        elif i%2 != 0 and j%2 == 0:
            print(" ", end = " ")
        else:
            print("*", end = " ")
    print()
```

```
*   *   *
  *   *
*   *   *
  *   *
*   *   *
```

Pattern 4 :-

```
In [17]:  size = int(input("Enter size: "))

          for i in range(size):
              # logic to print blank spaces
              print(" " * (size - (i+1)), end = "")
              # logic to print stars along with spaces
              print("* " * (i+1))
```

```
    *
   * *
  * * *
 * * * *
* * * * *
```

Pattern 5 :-

```
In [18]:  size = int(input("Enter size: "))

          for i in range(size):
              for j in range(i + 1):
                  if j == 0 or j == i or i == 0 or i == size-1:
                      print("*", end = " ")
                  else:
                      print(" ", end = " ")
              print()
```

```
*
* *
*   *
*     *
* * * * *
```

Pattern 6 :-

```
In [19]:  size = int(input("Enter size: "))

          for i in range(size):
              if i%2 == 0:
                  print("*" * size)
              else:
                  print(" " * (size-1) + "*")
```

```
*****
    *
*****
    *
*****
```

Pattern 7 :-

```python
In [20]: size = int(input("Enter size: "))

         for i in range(size):
             count = 1
             for j in range(i+1):
                 print(count, end = " ")
                 count += 1
             print()
```

```
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
```

```python
In [ ]:
```