In [5]:
```
#matrix input
row=10
column=5
l=[]
for i in range(row):
    k=[]
    for j in range(column):
        k.append(7)
    l.append(k)
print (l)
```

```
[[7, 7, 7, 7, 7], [7, 7, 7, 7, 7], [7, 7, 7, 7, 7], [7, 7, 7, 7, 7], [7, 7, 7, 7, 7], [7, 7, 7, 7, 7],
[7, 7, 7, 7, 7], [7, 7, 7, 7, 7], [7, 7, 7, 7, 7], [7, 7, 7, 7, 7]]
```

In [6]:
```
l=[]
for i in range(5):
    l.append(7)
print(l)
```

```
[7, 7, 7, 7, 7]
```

In [11]:
```
l=[]
for i in range(5):
    m=[]
    for j in range(4):
        m.append(7)
    l.append(m)
print(l)
```

```
[[7, 7, 7, 7], [7, 7, 7, 7], [7, 7, 7, 7], [7, 7, 7, 7], [7, 7, 7, 7]]
```

In [16]:
```
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
                    print(l[i][j],end="")
```

```
7777
7777
7777
7777
7777
```

In [2]:
```
# take as matrix as input and print the alternate rows
l=[]
rows=int(input("Enter rows:"))
column=int(input("Enter column:"))

for i in range(rows):
    m=[]
    for j in range(column):
        x=int(input("Enter element:"))
        m.append(x)
    l.append(m)
print(l)
print("original matrix:")
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
        print(l[i][j],end=" ")
print( )

print("\nalternate rows:")
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
            if i%2!=0:
                print(l[i][j],end=" ")
```

```
Enter rows:4
Enter column:4
Enter element:7
Enter element:8
Enter element:9
Enter element:8
Enter element:0
Enter element:6
Enter element:5
Enter element:5
Enter element:5
Enter element:6
Enter element:4
Enter element:5
Enter element:3
Enter element:3
Enter element:1
```

```
Enter element:78
[[7, 8, 9, 8], [0, 6, 5, 5], [5, 6, 4, 5], [3, 3, 1, 78]]
original matrix:

7 8 9 8
0 6 5 5
5 6 4 5
3 3 1 78
alternate rows:


0 6 5 5

3 3 1 78
```

In [3]:
```
## take as matrix as input and print the alternate column
l=[]
rows=int(input("Enter rows:"))
column=int(input("Enter column:"))

for i in range(rows):
    m=[]
    for j in range(column):
        x=int(input("Enter element:"))
        m.append(x)
    l.append(m)
print(l)
print("original matrix:")
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
        print(l[i][j],end=" ")
print( )

print("\nalternate rows:")
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
            if j%2!=0:
                print(l[i][j],end=" ")
```

```
Enter rows:4
Enter column:4
Enter element:2
Enter element:4
Enter element:7
Enter element:9
Enter element:2
Enter element:8
Enter element:2
Enter element:1
Enter element:0
Enter element:3
Enter element:5
Enter element:8
Enter element:5
Enter element:4
Enter element:25
```

```
Enter element:2
[[2, 4, 7, 9], [2, 8, 2, 1], [0, 3, 5, 8], [5, 4, 25, 2]]
original matrix:

2 4 7 9
2 8 2 1
0 3 5 8
5 4 25 2

alternate rows:

4 9
8 1
3 8
4 2
```

In [6]:
```
# take as matrix as input and print the even elements
l=[]
rows=int(input("Enter rows:"))
column=int(input("Enter column:"))
for i in range(rows):
    m=[]
    for j in range (column):
        x=int(input("Enter element:"))
        m.append(x)
    l.append(m)
print(l)
print("original matrix:")
for i in range(len(l)):
    print()
    for j in range((len(l[0]))):
        print(l[i][j],end=" ")
print()
print("\neven element:")
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
        if l[i][j]%2==0:
            print(l[i][j],end=" ")
```

```
Enter rows:4
Enter column:4
Enter element:2
Enter element:8
Enter element:7
Enter element:0
Enter element:4
Enter element:3
Enter element:6
Enter element:56
Enter element:5
Enter element:4
Enter element:3
Enter element:2
Enter element:1
Enter element:0
Enter element:4
Enter element:7
```

```
[[2, 8, 7, 0], [4, 3, 6, 56], [5, 4, 3, 2], [1, 0, 4, 7]]
original matrix:

2 8 7 0
4 3 6 56
5 4 3 2
1 0 4 7

even element:

2 8 0
4 6 56
4 2
0 4
```

In [8]:
```
# take as matrix as input and print the odd elements count
l=[]
rows=int(input("Enter rows:"))
column=int(input("Enter column:"))
for i in range(rows):
    m=[]
    for j in range (column):
        x=int(input("Enter element:"))
        m.append(x)
    l.append(m)
print(l)
print("original matrix:")
for i in range(len(l)):
    print()
    for j in range((len(l[0]))):
        print(l[i][j],end=" ")
print()
print("\nodd element count:")
count=0
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
        if l[i][j]%2!=0:
            count=count+1
            print(l[i][j],end=" ")

print("\ncount",count)
```

```
Enter rows:4
Enter column:3
Enter element:3
Enter element:45
Enter element:6
Enter element:7
Enter element:5
Enter element:4
Enter element:40
Enter element:23
Enter element:4
Enter element:4
Enter element:23
```

```
Enter element:26
[[3, 45, 6], [7, 5, 4], [40, 23, 4], [4, 23, 26]]
original matrix:

3 45 6
7 5 4
40 23 4
4 23 26

odd element count:

3 45
7 5
23
23
count 6
```

In [2]:
```
# take as matrix as input and add 3 with each elements and print
l=[]
rows=int(input("Enter rows:"))
column=int(input("Enter column:"))
for i in range(rows):
    m=[]
    for j in range (column):
        x=int(input("Enter element:"))
        m.append(x)
    l.append(m)
print(l)
print("original matrix:")
for i in range(len(l)):
    print()
    for j in range((len(l[0]))):
        print(l[i][j],end=" ")
print()
print("adding 3 with each elements")
for i in range(len(l)):
    print()
    for j in range(len(l[0])):
        print(l[i][j]+3,end=" ")
```

```
Enter rows:2
Enter column:2
Enter element:45
Enter element:8
Enter element:9
Enter element:6
[[45, 8], [9, 6]]
original matrix:

45 8
9 6
adding 3 with each elements

48 11
12 9
```

In [ ]:

In [ ]: