

In [1]:

```
#1) Polar Coordinates
```

```
import cmath
```

```
c=complex(input().strip())
x =cmath.polar(c)
print(x[0])
print(x[1])
```

```
1+2j
2.23606797749979
1.1071487177940904
```

In [3]:

```
#2) Find Angle MBC
```

```
import math
```

```
ab = float(input())
bc = float(input())
print(round(math.degrees(math.atan(ab/bc))),chr(176),sep="")
```

```
10
10
45°
```

In [4]:

```
#3) Triangle Quest
```

```
for i in range(1,int(input())+1):
    print((10**i//9)**2 )
```

```
5
1
121
12321
1234321
123454321
```

In [7]:

```
#4) Mod Divmod
```

```
from __future__ import division
```

```
if __name__ == '__main__':
    a = int(input())
    b = int(input())

    print(a//b);
    x=divmod(a,b)
    print(x[1],x,sep='\n')
```

```
177
10
17
7
(17, 7)
```

In [8]:

```
#5) Power - Mod Power
```

```
a=int(input())
b=int(input())
```

```
c=int(input())
print (a**b)
print ((a**b)%c)
```

```
3
4
5
81
1
```

In [9]:

```
#6) Integers Come In All Sizes
```

```
a,b,c,d = (int(input()) for i in range(4))
print(a**b+c**d)
```

```
9
29
7
27
4710194409608608369201743232
```

In [10]:

```
#7) Triangle Quest
```

```
for i in range(1,int(input())):
    print(((10**i)//9)*i)
```

```
7
1
22
333
4444
55555
666666
```

In []: