



```
Gabriel Catigoso Faria Oliveira - 20.7.4004  
# include <stdio.h>  
# include <stdlib.h>  
# include <math.h>  
typedef struct l
```

```
list {  
    float x;  
    float y;  
    struct l *next;  
};
```

```
list *  
typedef struct l  
list *head;  
list *tail;
```

```
int main();
```

```
+ create (createNode(x, y, next));
```

```
int main() {
```

```
    int n, x, y;
```

```
    printf("Digite o numero de elementos: ");  
    scanf("%d", &n);
```

```
    createNode(x, y, next) = null; // n = 0  
    printf(" ");
```

```
    for (int i = 0; i < n; i++) {
```

```
        printf("Digite o valor de x e y de cada elemento: ");  
        scanf("%f %f", &x, &y);  
        createNode(x, y, next);
```

```
    }
```

adidas

Gabriel Catigani Faria Oliveira - 20.7.2004

```
#include <stdlib.h>
```

```
#include <stdio.h>
```

```
#include <math.h>
```

```
typedef struct {
```

```
    float x;
```

```
    float y;
```

```
} ponto;
```

```
typedef struct {
```

```
    ponto coordC;
```

```
    float raio;
```

```
} circunferencia;
```

```
int secante (circunferencia C[], int m);
```

```
int main() {
```

```
    int m, sec;
```

```
    printf("Digite o numero de circunferencias");
```

```
    scanf("%d", &m);
```

```
    circunferencia *circunferencias = malloc (m * sizeof (circunferencia));
```

```
    printf("%d\n", m);
```

```
    for (int i=0; i<m; i++) {
```

```
        printf("Digite as coordenadas e o raio da circunferencia %d", i+1);
```

```
        scanf ("%f %f %f", &circunferencias[i].coordC.x, &circunferencias[i].
```

```
        coordC.y, &circunferencias[i].raio);
```


"mints" (1 m); 100 - small mint minted 1942

```
for(int i=0; i<n; i++)
```

$$sec = secante(\text{circunferencia}, m) \mid \leq \text{altura} \text{ altura}, \#$$

if (recante == 1)

print("A circunferência %d e a circunferência %d não
acertam em", i+1, i+2);

the

print("A circumference %d e a circumference %d mais
do que a anterior" % (i+1, i+2))

return 0;

3

```
int isContigCircular(C[], int n)
```

```
{
```

```
    int distances[n] = {0};
```

```
    for (int i = 0; i < n; i++)
```

```
{
```

```
        distances[i] = sqrt(pow(C[i].coord[0] - C[i].coord[0], 2) +  
                             pow(C[i+1].coord[0] - C[i+1].coord[0], 2));
```

```
}
```

```
    for (int i = 0; i < n; i++)
```

```
{
```

```
        if (distances[i] < (C[i].radius + C[i+1].radius))
```

```
            return 1
```

```
    else
```

```
        return 0
```

```
}
```