

I. Làm quen 2 vòng lặp lồng nhau

1. Vẽ hình chữ nhật bằng * với kích thước $n \times m$




```
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```

```
3 int main(){
4     int n, m;
5     scanf("%d%d",&n,&m);
6     for(int i=1;i<=n;++i){
7         for(int j=1;j<=m;++j){
8             printf("*");
9         }
10        printf("\n");
11    }
12 }
```

2. Vẽ tam giác bằng * (bai 6.16)

```
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```



```
int main(){  
    int n;  
    scanf("%d",&n);  
    for(int i=1; i<=n;++i){  
        for(int j=1;j<=i;++j)  
            printf("*");  
        printf("\n");  
    }  
}
```

3. Vẽ tam giác ngược

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```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=n; i>=1; --i){
        for(int j=1; j<=i; ++j)
            printf("*");
        printf("\n");
    }
}
```

II. Vòng lặp lồng nhau kết hợp if else.

1. Chữ nhật rỗng (Bai 6.10)



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```

```
int main(){
    int n, m;
    scanf("%d%d",&n,&m);
    for(int i=1;i<=n;++i){
        for(int j=1;j<=m;++j){
            if(i==1||i==n||j==1||j==m)
                printf("*");
            else printf(".");
        }
        printf("\n");
    }
}
```


2. Tam giác rỗng (Bai 6.12)

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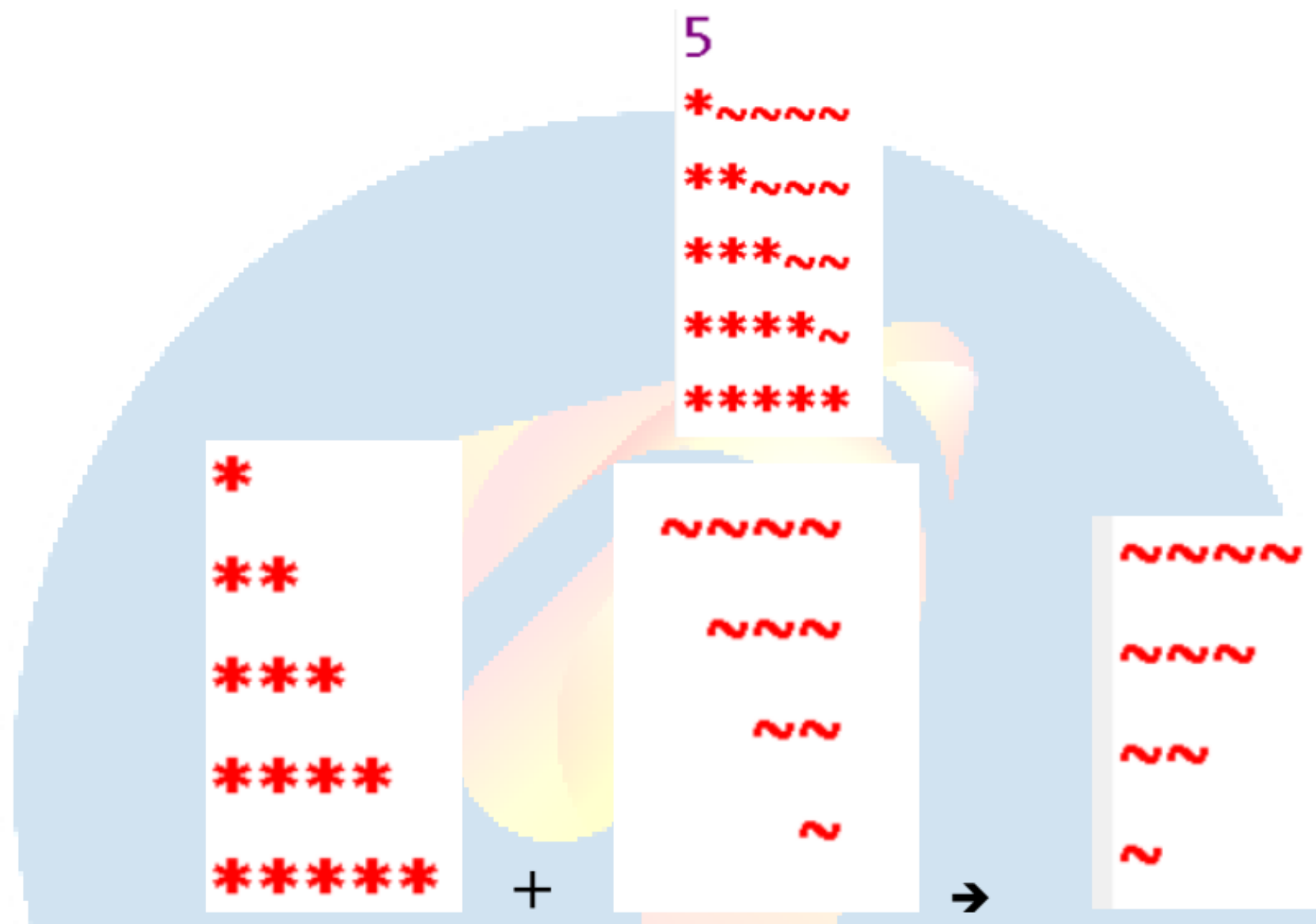


```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=1;i<=n;++i){
        for(int j=1;j<=i;++j){
            if(i==1||i==n||j==1||j==i)
                printf("*");
            else printf(".");
        }
        printf("\n");
    }
}
```

3. Tam giác ngược **rỗng** (Bài 6.04)

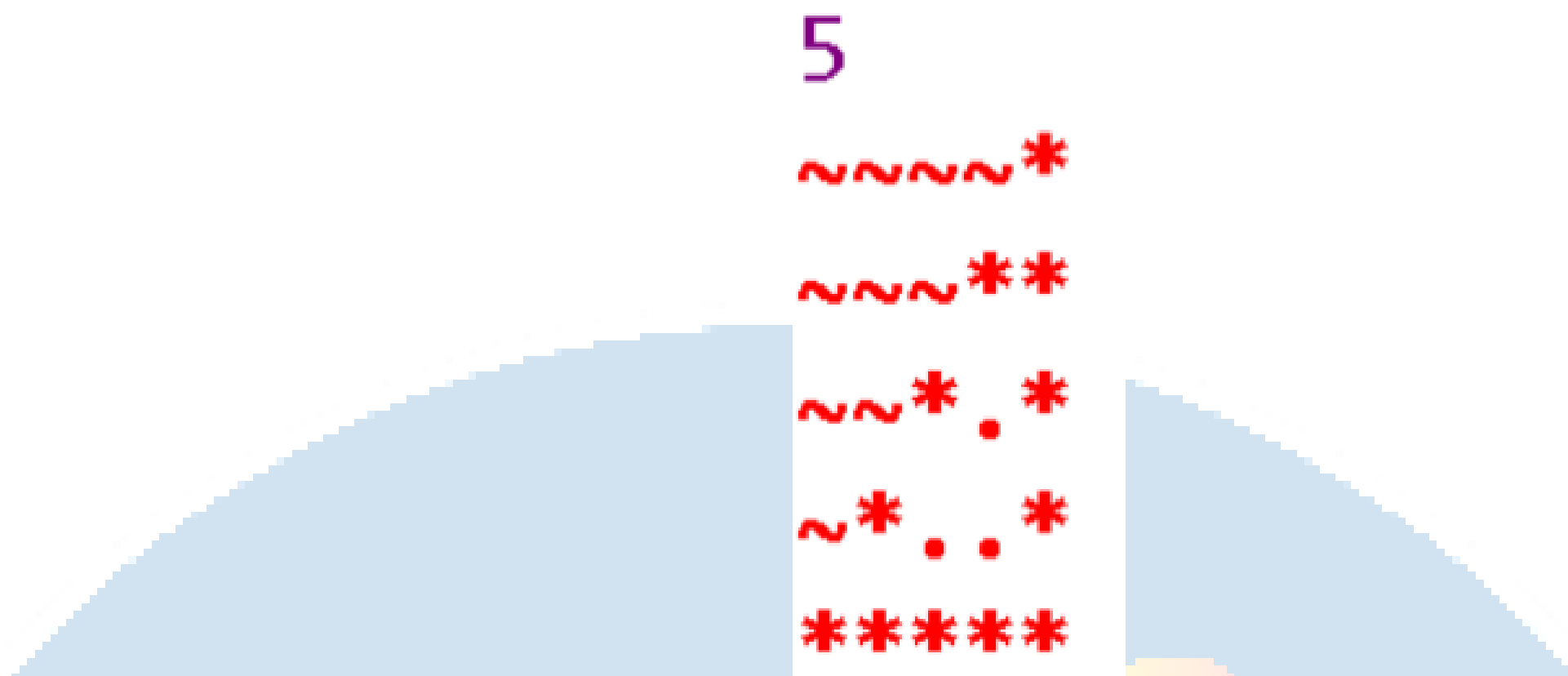
```
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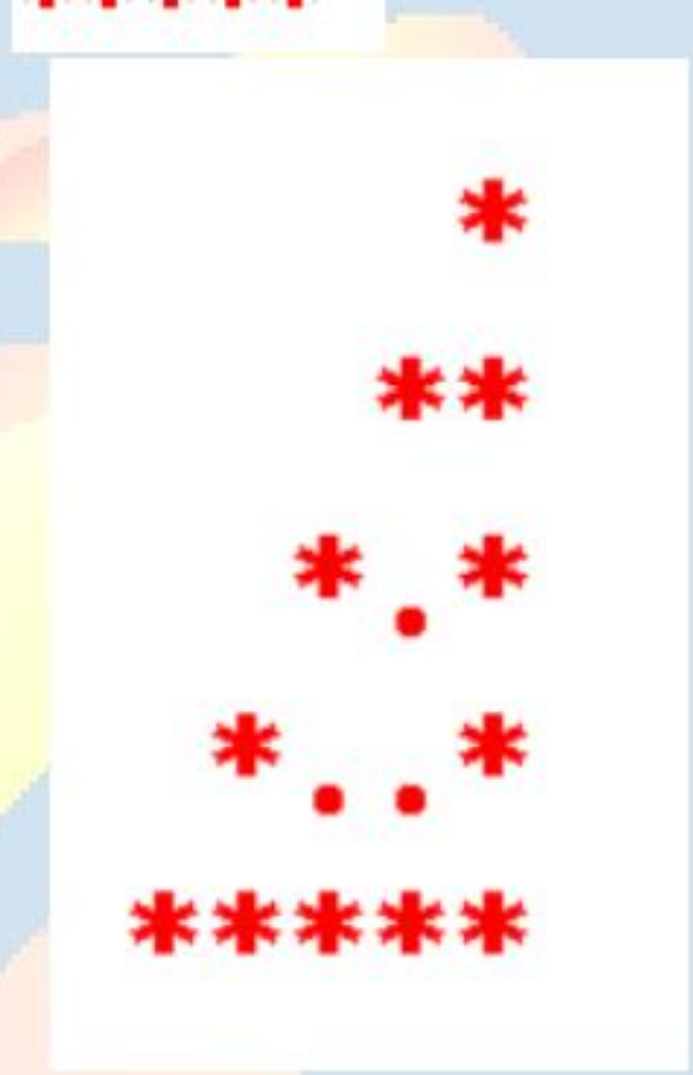
```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=n;i>=1;--i){
        for(int j=1;j<=i;++j){
            if(i==1||i==n||j==1||j==i)
                printf("*");
            else printf(".");
        }
        printf("\n");
    }
}
```



```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=1; i<=n;++i){
        for(int j=1;j<=i;++j)
            printf("*");
        for(int j=1;j<=n-i;++j)
            printf("~");
        printf("\n");
    }
}
```

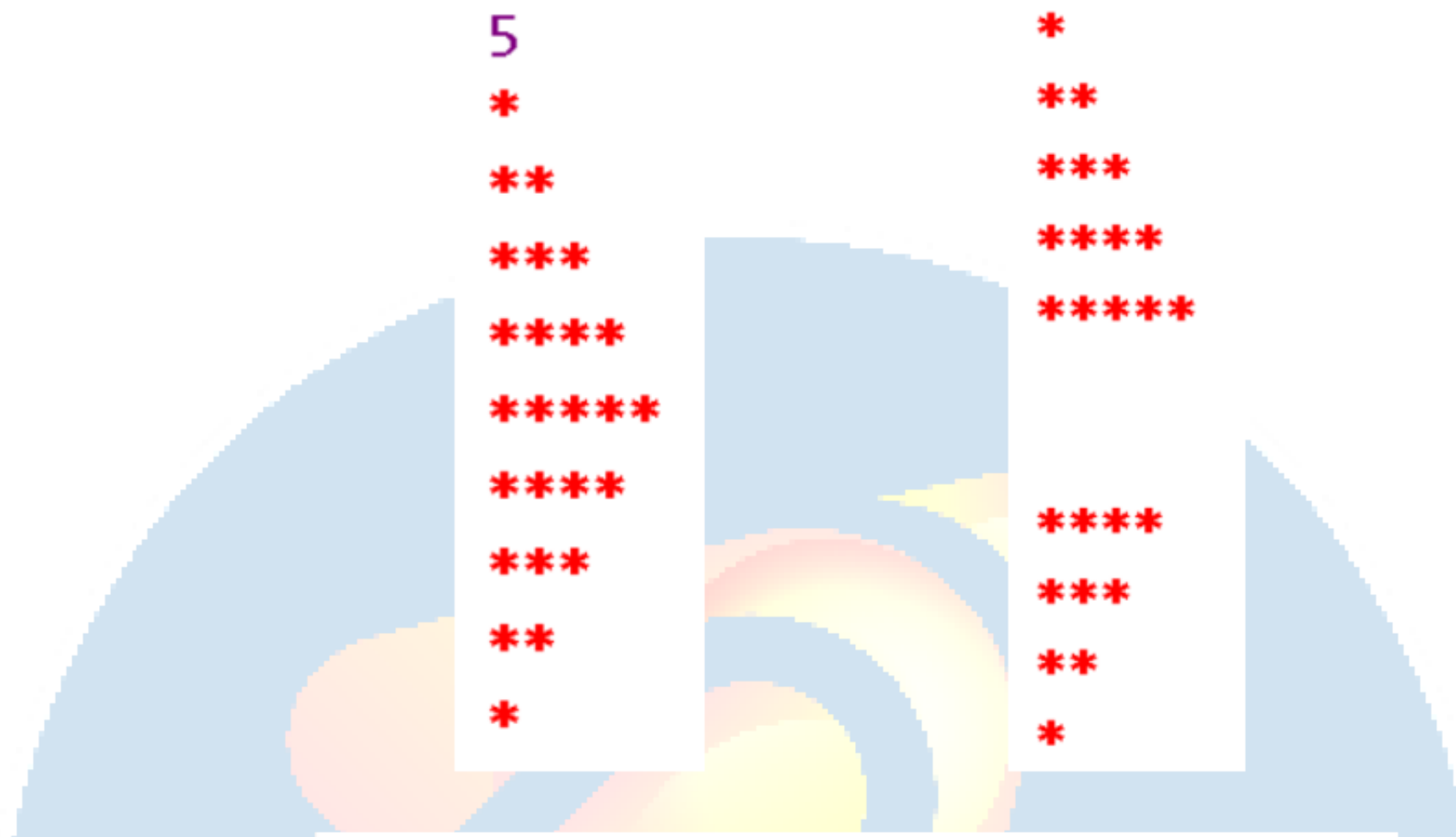
2. Vẽ hình 2 (*Bai 6.18*)






```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=1;i<=n;++i){
        for(int j=1;j<=n-i;++j)
            printf("~");
        for(int j=1;j<=i;++j)
            if(i==1||i==n||j==1||j==i)
                printf("*");
            else printf(".");
        printf("\n");
    }
}
```

3. Vẽ hình 3 (Bài 6.05)



```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=1;i<=n;++i){
        for(int j=1;j<=i;++j)
            printf("*");
        printf("\n");
    }
    for(int i=n-1;i>=1;--i){
        for(int j=1;j<=i;++j)
            printf("*");
        printf("\n");
    }
}
```

4. Vẽ hình 4

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```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=n;i>=1;--i){
        for(int j=1;j<i;++j)
            printf("~");
        for(int j=1;j<=i;++j)
            printf("*");
        printf("\n");
    }
```

```
    for(int i=2;i<=n;++i){
        for(int j=1;j<i;++j)
            printf("~");
        for(int j=1;j<=i;++j)
            printf("*");
        printf("\n");
    }
}
```

## 5. Vẽ hình 5 (Bai 6.20)

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```
int main(){
    int n;
    scanf("%d",&n);
    for(int i=n;i>=1;--i){
        for(int j=1;j<=i;++j)
            printf("*");
        for(int j=1;j<=(n-i)*2;++j)
            printf("~");
        for(int j=1;j<=i;++j)
            printf("*");
        printf("\n");
    }
```

```
for(int i=2;i<=n;++i){
    for(int j=1;j<=i;++j)
        printf("*");
    for(int j=1;j<=(n-i)*2;++j)
        printf("~");
    for(int j=1;j<=i;++j)
        printf("*");
    printf("\n");
}
```