

First Programs

10th January, 2019

Leap Year

1900

2000

2100

2200

2300

2400

2500

2600

2700

2800

2900

Leap Year

Rules

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is **not** divisible by 4, then it is **not** a leap year.

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 2019 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 2018 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 2020 ✓

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 1900 ✓

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 1900 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 1800 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.

Examples

Year = 2100 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is **not** a leap year.

Examples

Year = 2100 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.

Examples

Year = 2000 ✗

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.

Examples

Year = 2000 ✓

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.

Examples

Year = 1600 ✓

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.

Examples

Year = 2400 ✓

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

Examples

Year = 2400 ✓

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.



Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

If divisible by 400, print "Yes".

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".  
else
```

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".
```

```
else {
```

```
}
```

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".  
else {  
    If divisible by 100, print "No".  
  
}
```

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".  
else {  
    If divisible by 100, print "No".  
    else  
  
}
```


Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".  
else {  
    If divisible by 100, print "No".  
    else {  
  
        }  
    }  
}
```

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".  
else {  
    If divisible by 100, print "No".  
    else {  
        If divisible by 4, print "Yes".  
    }  
}
```

Leap Year

Rules

1. If the year is divisible by 4, then it is a leap year.
2. If the year is not divisible by 4, then it is not a leap year.
3. If the year is divisible by 100, then it is not a leap year.
4. If the year is divisible by 400, then it is a leap year.

```
If divisible by 400, print "Yes".
else {
    If divisible by 100, print "No".
    else {
        If divisible by 4, print "Yes".
        else print "No"
    }
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    If divisible by 400, print "Yes".
    else {
        If divisible by 100, print "No".
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    If divisible by 400, print "Yes".
    else {
        If divisible by 100, print "No".
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        If divisible by 100, print "No".
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        If divisible by 100, print "No".
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        If divisible by 100, print "No".
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```


Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            If divisible by 4, print "Yes".
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            if (year % 4 == 0) printf("Yes");
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            if (year % 4 == 0) printf("Yes");
            else print "No".
        }
    }
    return 0;
}
```

Leap Year

```
#include <stdio.h>
int main(void)
{
    int year;
    year = 2018;
    if (year % 400 == 0) printf("Yes");
    else {
        if (year % 100 == 0) printf("No");
        else {
            if (year % 4 == 0) printf("Yes");
            else printf("No");
        }
    }
    return 0;
}
```

Smallest of a , b , and c



Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{

    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c; Declare the variables.

    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;

    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    If a <= b and a <= c then print a.

    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    If a <= b and a <= c then print a.
    If b <= a and b <= c then print b.

    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    If a <= b and a <= c then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    If a <= b and a <= c then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if a <= b and a <= c then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```


Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if a <= b and a <= c then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if (a <= b and a <= c) then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if (a <= b && a <= c) then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) then print a.
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) printf("%d", a);
    If b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) printf("%d", a);
    if b <= a and b <= c then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) printf("%d", a);
    if ((b <= a) && (b <= c)) then print b.
    If c <= a and c <= b then print c.
    return 0;
}
```


Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) printf("%d", a);
    if ((b <= a) && (b <= c)) printf("%d", b);
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) printf("%d", a);
    if ((b <= a) && (b <= c)) printf("%d", b);
    If c <= a and c <= b then print c.
    return 0;
}
```

Smallest of a, b, and c

```
#include <stdio.h>
int main(void)
{
    int a, b, c;
    a = 3;
    b = 4;
    c = 5;
    if ((a <= b) && (a <= c)) printf("%d", a);
    if ((b <= a) && (b <= c)) printf("%d", b);
    if ((c <= a) && (c <= b)) printf("%d", c);
    return 0;
}
```

Divisible 3 or 5



Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{

    return 0;
}
```

Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{
    int a;

    return 0;
}
```

Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;

    return 0;
}
```

Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    If a is divisible by 3 or 5 then print "Yes",
    else print "No".
    return 0;
}
```


Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%3 == 0) or (a%5 == 0)) printf("Yes");
    else print "No".
    return 0;
}
```

Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%3 == 0) || (a%5 == 0)) printf("Yes");
    else print "No".
    return 0;
}
```

Divisible 3 or 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%3 == 0) || (a%5 == 0)) printf("Yes");
    else printf("No");
    return 0;
}
```

Either a is even or a is divisible by 3 but not 5



Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    If a is even, print "Yes",
    else {
        if a is divisible by 3 but not ...
    }
    return 0;
}
```


Either a is even or a is divisible by 3 but not 5

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

```
int main(void)
```

```
{
```

```
    int a;
```

```
    a = 3;
```

```
    Why not use the power of && and ||?
```

```
    return 0;
```

```
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if (

return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0)                )

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) ||                )

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || (

    ))

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || ((a%3 == 0)           ))

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || ((a%3 == 0) &&          ))

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || ((a%3 == 0) && (a%5 != 0)))

    return 0;
}
```


Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || ((a%3 == 0) && (a%5 != 0)))

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || ((a%3 == 0) && (a%5 != 0)))
        printf("Yes");

    return 0;
}
```

Either a is even or a is divisible by 3 but not 5

```
#include <stdio.h>
int main(void)
{
    int a;
    a = 3;
    if ((a%2 == 0) || ((a%3 == 0) && (a%5 != 0)))
        printf("Yes");
    else printf("No");

    return 0;
}
```