



Lesson 17 Binary Program

A program to convert **binary** to **decimal**:

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

```
int main() {
```

```
    int binary, decimal = 0,y=1;
```

```
    //we declared two variables
```

```
    printf("Enter a binary number : ");
```

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

```
    //we take input from the user
```

```
    while (binary) {
```

```
        decimal += binary % 10 * y;
```

```
        binary /= 10;
```

```
        //to split the last digit from the number
```

```
        y *= 2;
```

```
    }
```

```
    printf("%d", decimal);
```

```
}
```

Try to code yourself:

- - > click here: [lesson 17 Binary Program - Replit](#)



How to split a number into digits:

- **Let's take 234:**

$$234 \% 10 = 4$$

$$23 \% 10 = 3$$

$$2 \% 10 = 2$$