

**Problem32** : Check whether a number is an Armstrong no.

**Code:**

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

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

```
int main() {
```

```
    int num, original, sum = 0, digit, n = 0;
```

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

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

```
    original = num;
```

```
    for(int temp = num; temp != 0; temp = temp  
/ 10)
```

```
        n++;
```

```
    for(int temp = num; temp != 0; temp = temp  
/ 10) {
```

```
        digit = temp % 10;
```

```
        sum += pow(digit, n);
```

```
}

if(sum == original)
    printf("%d is an Armstrong number\n",
original);
else
    printf("%d is not an Armstrong
number\n", original);

return 0;
}
```

### **Output:**

153

153 is an Armstrong number

121

121 is not an Armstrong number