1

```c
#include <stdio.h>

int main() {
    for (int i = 123; i < 333; i++) {
        int a[10] = {0}, sum = 0;
        //第一个数
        a[i / 100] = 1; //百位
        a[i / 10 % 10] = 1; //个位
        a[i % 10] = 1; //十位

        //第二个数
        a[i * 2 / 100] = 1; //百位
        a[i * 2 / 10 % 10] = 1; //个位
        a[i * 2 % 10] = 1; //十位

        //第三个数
        a[i * 3 / 100] = 1; //百位
        a[i * 3 / 10 % 10] = 1; //个位
        a[i * 3 % 10] = 1; //十位
        for (int j = 1; j < 10; j++) {
            //加上数组中的数
            sum += a[j];
        }
        if(sum == 9) {
            //满足1:2:3的条件
            printf("%d %d %d\n", i, i * 2, i * 3);
        }
    }
    return 0;
}
```

2

```c
#include <stdio.h>

int main() {
    for (int i = 123; i < 333; i++) {
        int num[10] = {0}, x, y, z, n = 0;
        num[0] = 1;
        while (++n < 4) {
            x = i * n % 10;
            y = i * n / 10 % 10;
            z = i * n / 100;
            if (num[x] || num[y] || num[z] || x == y || y == z || x == z) break;
            num[x] = num[y] = num[z] = 1;
        }
        if (n == 4) printf("%d %d %d\n", i, i * 2, i * 3);
    }
    return 0;
}
```

3

```c
#include <stdio.h>

int main() {
    for (int i = 123; i < 333; i++) {
        int num[10] = {0}, x, y = i, n = 1;
        while (n < 4) {
            x = y % 10;
            if (!x || num[x]) break;
            num[x] = 1;
            y = (y / 10 == 0 ? ++n * i : y / 10);
        }
        if (n == 4) printf("%d %d %d\n", i, i * 2, i * 3);
    }
    return 0;
}
```

4

```c
#include <stdio.h>

int check(int i) {
    int num[10] = {0}, x, y = i, n = 1;
    while (n < 4) {
        x = y % 10;
        if (!x || num[x]) return 0;
        num[x] = 1;
        y = (y / 10 == 0 ? ++n * i : y / 10);
    }
    return 1;
}

int main() {
    for (int i = 123; i < 333; i++) {
        check(i) && printf("%d %d %d\n", i, i * 2, i * 3);
    }
    return 0;
}
```

5

```cpp
#include <cstdio>
#include <algorithm>
using namespace std;

int main() {
    int num[9] = {1, 2, 3, 4, 5, 6, 7, 8, 9};
    do {
        int a = num[0] * 100 + num[1] * 10 + num[2];
        int b = num[3] * 100 + num[4] * 10 + num[5];
        int c = num[6] * 100 + num[7] * 10 + num[8];
        if (a * 2 == b && a * 3 == c) {
            printf("%d %d %d\n", a, b, c);
        }
    } while(next_permutation(num, num + 9));
    return 0;
}
```