

Praeludium in C in C

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// gcc praeludium.c -o praeludium && ./praeludium | aplay -f cd
static double ff[] = {110.0,116.5,123.5,130.8,138.6,146.8,155.6,164.8,
    174.6,185.0,196.0,207.7};
static char const* n1 = "@DGLP@BINQ?BGNQ@DGLP@DIPU@BFIN?BGNS?@DGL=@DGL"
    "6=BFL;?BGK;>DGM9=BIN9<BEK8;@GL89=@E69=@E/6;?E48;@D4;>@D-9=@D.4=@C"
    "09?@B/9=?B/8;@D/6;@E/6;?E/7=@F/8;@G/6;@E/6;?E(4;>D";
static char const* n2 = "(49=@E@=@=9=9696(3GKNQNKNGKBEDB(4DGLGD3";
static void p(int n) {
    double f = ff[n % 12];
    while (n >= 12) { n -= 12; f *= 2; }
    for (int k = 0; k < 9000; ++k) {
        double ph = k * f / 44100;
        int v = (int)((ph - (int)ph) * 16384);
        if (v > 8192) v = 16384 - v;
        if (k < 400) v = (int)(v * k / 400);
        if (k > 8000) v = (int)(v * (9000 - k) / 1000);
        putchar(v & 255); putchar((v >> 8) & 255);
        putchar(v & 255); putchar((v >> 8) & 255);
    }
}
static void p2() {
    for (int k = 0; k < 72000; ++k) {
        double ph = k / 200.4545;
        int v = (int)((ph - (int)ph) * 16384);
        if (v > 8192) v = 16384 - v;
        if (k < 400) v = (int)(v * k / 400);
        if (k > 9000) v = (int)(v * (72000 - k) / 63000);
        putchar(v & 255); putchar((v >> 8) & 255);
        putchar(v & 255); putchar((v >> 8) & 255);
    }
}
int main() {
    for (int i = 0; i < strlen(n1) / 5; ++i)
        for (int j = 0; j < 16; ++j)
            p(n1[i * 5 + (j % 8) % 5] - 40);
    for (int i = 0; i < strlen(n2); ++i) p(n2[i] - 40); p2();
}
```