scaled\_PRECIPITATIONS(mm)\_lag\_1 = (PRECIPITATIONS(mm)\_lag\_1-1.077389956)/3.715929985;

scaled\_TAVG(C)\_lag\_1 = (TAVG(C)\_lag\_1-15.34119987)/8.136030197;

scaled\_TMAX(C)\_lag\_1 = (TMAX(C)\_lag\_1-21.96080017)/8.944169998;

scaled\_TMIN(C)\_lag\_1 = (TMIN(C)\_lag\_1-8.99958992)/20.02560043;

scaled\_PRESSURE(hPa)\_lag\_1 = (PRESSURE(hPa)\_lag\_1-1017.309998)/20.05410004;

scaled\_WINDSPEED(km/h)\_lag\_1 = (WINDSPEED(km/h)\_lag\_1-10.55480003)/5.649680138;

scaled\_HUMIDITY(percentage)\_lag\_1 = (HUMIDITY(percentage)\_lag\_1-58.62670135)/19.5333004;

scaled\_DAY\_lag\_0 = (DAY\_lag\_0-15.70059967)/8.799559593;

scaled\_MONTH\_lag\_0 = (MONTH\_lag\_0-6.37594986)/3.491400003;

scaled\_WEEKDAY\_lag\_0 = (WEEKDAY\_lag\_0-4.002409935)/2.082989931;

scaled\_PM2.5(AQI)\_lag\_0 = (PM2.5(AQI)\_lag\_0-54.4776001)/19.5258007;

scaled\_PM10(AQI)\_lag\_0 = (PM10(AQI)\_lag\_0-24.53549957)/11.86229992;

scaled\_O3(AQI)\_lag\_0 = (O3(AQI)\_lag\_0-32.79840088)/14.54819965;

scaled\_NO2(AQI)\_lag\_0 = (NO2(AQI)\_lag\_0-24.17060089)/10.29259968;

scaled\_SO2(AQI)\_lag\_0 = (SO2(AQI)\_lag\_0-3.113509893)/2.05302;

scaled\_PRECIPITATIONS(mm)\_lag\_0 = (PRECIPITATIONS(mm)\_lag\_0-1.076429963)/3.717200041;

scaled\_TAVG(C)\_lag\_0 = (TAVG(C)\_lag\_0-15.34659958)/8.135100365;

scaled\_TMAX(C)\_lag\_0 = (TMAX(C)\_lag\_0-21.96769905)/8.94081974;

scaled\_TMIN(C)\_lag\_0 = (TMIN(C)\_lag\_0-9.000029564)/19.94210052;

scaled\_PRESSURE(hPa)\_lag\_0 = (PRESSURE(hPa)\_lag\_0-1017.309998)/19.97850037;

scaled\_WINDSPEED(km/h)\_lag\_0 = (WINDSPEED(km/h)\_lag\_0-10.5539999)/5.63767004;

scaled\_HUMIDITY(percentage)\_lag\_0 = (HUMIDITY(percentage)\_lag\_0-58.61009979)/19.52330017;

perceptron\_layer\_1\_output\_0 = tanh( -2.02123 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*0.0338929) + (scaled\_TAVG(C)\_lag\_1\*-0.411994) + (scaled\_TMAX(C)\_lag\_1\*0.391274) + (scaled\_TMIN(C)\_lag\_1\*0.728711) + (scaled\_PRESSURE(hPa)\_lag\_1\*0.392377) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.463761) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.440257) + (scaled\_DAY\_lag\_0\*-0.310097) + (scaled\_MONTH\_lag\_0\*0.335254) + (scaled\_WEEKDAY\_lag\_0\*0.062457) + (scaled\_PM2.5(AQI)\_lag\_0\*0.299843) + (scaled\_PM10(AQI)\_lag\_0\*0.273871) + (scaled\_O3(AQI)\_lag\_0\*-0.520249) + (scaled\_NO2(AQI)\_lag\_0\*0.11948) + (scaled\_SO2(AQI)\_lag\_0\*-0.752178) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.101714) + (scaled\_TAVG(C)\_lag\_0\*-0.4688) + (scaled\_TMAX(C)\_lag\_0\*-0.0788592) + (scaled\_TMIN(C)\_lag\_0\*-0.617514) + (scaled\_PRESSURE(hPa)\_lag\_0\*-1.1142) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.0650599) + (scaled\_HUMIDITY(percentage)\_lag\_0\*0.157926) );

perceptron\_layer\_1\_output\_1 = tanh( 0.492875 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*-9.10331e-05) + (scaled\_TAVG(C)\_lag\_1\*-0.0324468) + (scaled\_TMAX(C)\_lag\_1\*-0.101602) + (scaled\_TMIN(C)\_lag\_1\*-0.412209) + (scaled\_PRESSURE(hPa)\_lag\_1\*0.179728) + (scaled\_WINDSPEED(km/h)\_lag\_1\*0.0422834) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.0176361) + (scaled\_DAY\_lag\_0\*-0.0120101) + (scaled\_MONTH\_lag\_0\*0.270194) + (scaled\_WEEKDAY\_lag\_0\*0.207023) + (scaled\_PM2.5(AQI)\_lag\_0\*0.0513616) + (scaled\_PM10(AQI)\_lag\_0\*-0.112572) + (scaled\_O3(AQI)\_lag\_0\*0.0851651) + (scaled\_NO2(AQI)\_lag\_0\*-0.4249) + (scaled\_SO2(AQI)\_lag\_0\*0.128098) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.00352874) + (scaled\_TAVG(C)\_lag\_0\*0.707942) + (scaled\_TMAX(C)\_lag\_0\*-0.185338) + (scaled\_TMIN(C)\_lag\_0\*-0.472779) + (scaled\_PRESSURE(hPa)\_lag\_0\*-0.154508) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.0342609) + (scaled\_HUMIDITY(percentage)\_lag\_0\*-0.0974361) );

perceptron\_layer\_1\_output\_2 = tanh( 0.430842 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*-0.754014) + (scaled\_TAVG(C)\_lag\_1\*0.648864) + (scaled\_TMAX(C)\_lag\_1\*0.674728) + (scaled\_TMIN(C)\_lag\_1\*-0.449052) + (scaled\_PRESSURE(hPa)\_lag\_1\*0.734738) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.0988615) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.134291) + (scaled\_DAY\_lag\_0\*0.105161) + (scaled\_MONTH\_lag\_0\*0.818673) + (scaled\_WEEKDAY\_lag\_0\*-0.825957) + (scaled\_PM2.5(AQI)\_lag\_0\*0.490684) + (scaled\_PM10(AQI)\_lag\_0\*0.790902) + (scaled\_O3(AQI)\_lag\_0\*-0.385802) + (scaled\_NO2(AQI)\_lag\_0\*0.730734) + (scaled\_SO2(AQI)\_lag\_0\*1.36741) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*0.583046) + (scaled\_TAVG(C)\_lag\_0\*0.772462) + (scaled\_TMAX(C)\_lag\_0\*-0.241621) + (scaled\_TMIN(C)\_lag\_0\*-0.23732) + (scaled\_PRESSURE(hPa)\_lag\_0\*-1.04073) + (scaled\_WINDSPEED(km/h)\_lag\_0\*0.0247589) + (scaled\_HUMIDITY(percentage)\_lag\_0\*0.0469635) );

perceptron\_layer\_1\_output\_3 = tanh( -0.848953 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*0.179186) + (scaled\_TAVG(C)\_lag\_1\*-0.176006) + (scaled\_TMAX(C)\_lag\_1\*0.162784) + (scaled\_TMIN(C)\_lag\_1\*-0.234277) + (scaled\_PRESSURE(hPa)\_lag\_1\*0.512174) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.742885) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.132084) + (scaled\_DAY\_lag\_0\*-0.193059) + (scaled\_MONTH\_lag\_0\*2.2561) + (scaled\_WEEKDAY\_lag\_0\*0.094073) + (scaled\_PM2.5(AQI)\_lag\_0\*0.177604) + (scaled\_PM10(AQI)\_lag\_0\*0.0359634) + (scaled\_O3(AQI)\_lag\_0\*-0.58049) + (scaled\_NO2(AQI)\_lag\_0\*0.239862) + (scaled\_SO2(AQI)\_lag\_0\*-0.4695) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*0.0622808) + (scaled\_TAVG(C)\_lag\_0\*-1.15508) + (scaled\_TMAX(C)\_lag\_0\*0.276045) + (scaled\_TMIN(C)\_lag\_0\*-0.559359) + (scaled\_PRESSURE(hPa)\_lag\_0\*0.599823) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.21457) + (scaled\_HUMIDITY(percentage)\_lag\_0\*0.0127678) );

perceptron\_layer\_1\_output\_4 = tanh( 0.415118 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*0.00956743) + (scaled\_TAVG(C)\_lag\_1\*-0.137719) + (scaled\_TMAX(C)\_lag\_1\*-0.0792056) + (scaled\_TMIN(C)\_lag\_1\*0.273453) + (scaled\_PRESSURE(hPa)\_lag\_1\*-0.0460255) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.0314126) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.00260653) + (scaled\_DAY\_lag\_0\*-0.0122176) + (scaled\_MONTH\_lag\_0\*0.0547448) + (scaled\_WEEKDAY\_lag\_0\*0.0420766) + (scaled\_PM2.5(AQI)\_lag\_0\*0.00591373) + (scaled\_PM10(AQI)\_lag\_0\*0.085763) + (scaled\_O3(AQI)\_lag\_0\*-0.124683) + (scaled\_NO2(AQI)\_lag\_0\*0.118485) + (scaled\_SO2(AQI)\_lag\_0\*-0.682055) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.0138053) + (scaled\_TAVG(C)\_lag\_0\*-0.363715) + (scaled\_TMAX(C)\_lag\_0\*0.198334) + (scaled\_TMIN(C)\_lag\_0\*0.184153) + (scaled\_PRESSURE(hPa)\_lag\_0\*0.0794382) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.0206218) + (scaled\_HUMIDITY(percentage)\_lag\_0\*-0.0380483) );

perceptron\_layer\_1\_output\_5 = tanh( -0.30851 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*0.060174) + (scaled\_TAVG(C)\_lag\_1\*-0.736821) + (scaled\_TMAX(C)\_lag\_1\*0.0381199) + (scaled\_TMIN(C)\_lag\_1\*0.775626) + (scaled\_PRESSURE(hPa)\_lag\_1\*0.0406248) + (scaled\_WINDSPEED(km/h)\_lag\_1\*0.0151941) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.0726788) + (scaled\_DAY\_lag\_0\*0.10613) + (scaled\_MONTH\_lag\_0\*0.0435059) + (scaled\_WEEKDAY\_lag\_0\*0.918917) + (scaled\_PM2.5(AQI)\_lag\_0\*-0.000680052) + (scaled\_PM10(AQI)\_lag\_0\*0.262926) + (scaled\_O3(AQI)\_lag\_0\*0.960905) + (scaled\_NO2(AQI)\_lag\_0\*0.895816) + (scaled\_SO2(AQI)\_lag\_0\*0.119478) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.656272) + (scaled\_TAVG(C)\_lag\_0\*0.228284) + (scaled\_TMAX(C)\_lag\_0\*0.155673) + (scaled\_TMIN(C)\_lag\_0\*0.369841) + (scaled\_PRESSURE(hPa)\_lag\_0\*0.252548) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.272702) + (scaled\_HUMIDITY(percentage)\_lag\_0\*-0.17676) );

perceptron\_layer\_1\_output\_6 = tanh( 1.33097 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*0.0971543) + (scaled\_TAVG(C)\_lag\_1\*-0.259203) + (scaled\_TMAX(C)\_lag\_1\*-0.0335226) + (scaled\_TMIN(C)\_lag\_1\*-0.250438) + (scaled\_PRESSURE(hPa)\_lag\_1\*-0.254782) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.106326) + (scaled\_HUMIDITY(percentage)\_lag\_1\*0.193652) + (scaled\_DAY\_lag\_0\*-0.00684006) + (scaled\_MONTH\_lag\_0\*0.0741473) + (scaled\_WEEKDAY\_lag\_0\*0.0590215) + (scaled\_PM2.5(AQI)\_lag\_0\*-0.353014) + (scaled\_PM10(AQI)\_lag\_0\*0.214223) + (scaled\_O3(AQI)\_lag\_0\*-0.802816) + (scaled\_NO2(AQI)\_lag\_0\*0.0256968) + (scaled\_SO2(AQI)\_lag\_0\*0.0971361) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.111882) + (scaled\_TAVG(C)\_lag\_0\*0.847823) + (scaled\_TMAX(C)\_lag\_0\*-0.902162) + (scaled\_TMIN(C)\_lag\_0\*-0.95025) + (scaled\_PRESSURE(hPa)\_lag\_0\*0.174837) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.156633) + (scaled\_HUMIDITY(percentage)\_lag\_0\*-0.0966519) );

perceptron\_layer\_1\_output\_7 = tanh( -1.53168 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*-0.319955) + (scaled\_TAVG(C)\_lag\_1\*0.0280642) + (scaled\_TMAX(C)\_lag\_1\*-1.11567) + (scaled\_TMIN(C)\_lag\_1\*-0.705694) + (scaled\_PRESSURE(hPa)\_lag\_1\*0.0472933) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.0795358) + (scaled\_HUMIDITY(percentage)\_lag\_1\*0.187385) + (scaled\_DAY\_lag\_0\*0.117595) + (scaled\_MONTH\_lag\_0\*0.368673) + (scaled\_WEEKDAY\_lag\_0\*0.341458) + (scaled\_PM2.5(AQI)\_lag\_0\*0.860947) + (scaled\_PM10(AQI)\_lag\_0\*-0.263197) + (scaled\_O3(AQI)\_lag\_0\*-0.845723) + (scaled\_NO2(AQI)\_lag\_0\*-0.502984) + (scaled\_SO2(AQI)\_lag\_0\*-0.197295) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*0.0679869) + (scaled\_TAVG(C)\_lag\_0\*-0.655264) + (scaled\_TMAX(C)\_lag\_0\*-0.943308) + (scaled\_TMIN(C)\_lag\_0\*0.734939) + (scaled\_PRESSURE(hPa)\_lag\_0\*-0.191049) + (scaled\_WINDSPEED(km/h)\_lag\_0\*0.0646869) + (scaled\_HUMIDITY(percentage)\_lag\_0\*0.402303) );

perceptron\_layer\_1\_output\_8 = tanh( -0.562577 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*0.0140289) + (scaled\_TAVG(C)\_lag\_1\*0.407051) + (scaled\_TMAX(C)\_lag\_1\*-0.339589) + (scaled\_TMIN(C)\_lag\_1\*-0.518093) + (scaled\_PRESSURE(hPa)\_lag\_1\*-0.21391) + (scaled\_WINDSPEED(km/h)\_lag\_1\*0.0178015) + (scaled\_HUMIDITY(percentage)\_lag\_1\*0.0804048) + (scaled\_DAY\_lag\_0\*0.0560022) + (scaled\_MONTH\_lag\_0\*0.0172874) + (scaled\_WEEKDAY\_lag\_0\*0.00355931) + (scaled\_PM2.5(AQI)\_lag\_0\*0.0707851) + (scaled\_PM10(AQI)\_lag\_0\*0.744401) + (scaled\_O3(AQI)\_lag\_0\*-0.00185703) + (scaled\_NO2(AQI)\_lag\_0\*-0.270686) + (scaled\_SO2(AQI)\_lag\_0\*0.0796156) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.337567) + (scaled\_TAVG(C)\_lag\_0\*0.380639) + (scaled\_TMAX(C)\_lag\_0\*-0.375547) + (scaled\_TMIN(C)\_lag\_0\*-0.265739) + (scaled\_PRESSURE(hPa)\_lag\_0\*0.241685) + (scaled\_WINDSPEED(km/h)\_lag\_0\*0.0274216) + (scaled\_HUMIDITY(percentage)\_lag\_0\*-0.00690999) );

perceptron\_layer\_1\_output\_9 = tanh( 2.26874 + (scaled\_PRECIPITATIONS(mm)\_lag\_1\*-0.000788276) + (scaled\_TAVG(C)\_lag\_1\*0.444053) + (scaled\_TMAX(C)\_lag\_1\*0.404976) + (scaled\_TMIN(C)\_lag\_1\*-0.0418703) + (scaled\_PRESSURE(hPa)\_lag\_1\*-0.539812) + (scaled\_WINDSPEED(km/h)\_lag\_1\*-0.0878698) + (scaled\_HUMIDITY(percentage)\_lag\_1\*-0.0999681) + (scaled\_DAY\_lag\_0\*0.44595) + (scaled\_MONTH\_lag\_0\*-0.0244304) + (scaled\_WEEKDAY\_lag\_0\*-0.469572) + (scaled\_PM2.5(AQI)\_lag\_0\*-0.0194883) + (scaled\_PM10(AQI)\_lag\_0\*-0.119941) + (scaled\_O3(AQI)\_lag\_0\*-0.0625266) + (scaled\_NO2(AQI)\_lag\_0\*-0.452739) + (scaled\_SO2(AQI)\_lag\_0\*-0.418219) + (scaled\_PRECIPITATIONS(mm)\_lag\_0\*-0.00636572) + (scaled\_TAVG(C)\_lag\_0\*0.306131) + (scaled\_TMAX(C)\_lag\_0\*0.250097) + (scaled\_TMIN(C)\_lag\_0\*0.202051) + (scaled\_PRESSURE(hPa)\_lag\_0\*-0.900295) + (scaled\_WINDSPEED(km/h)\_lag\_0\*-0.156608) + (scaled\_HUMIDITY(percentage)\_lag\_0\*-0.332999) );

perceptron\_layer\_2\_output\_0 = ( 0.96769 + (perceptron\_layer\_1\_output\_0\*0.279869) + (perceptron\_layer\_1\_output\_1\*-0.412671) + (perceptron\_layer\_1\_output\_2\*0.232407) + (perceptron\_layer\_1\_output\_3\*0.0977992) + (perceptron\_layer\_1\_output\_4\*0.116731) + (perceptron\_layer\_1\_output\_5\*0.213226) + (perceptron\_layer\_1\_output\_6\*-0.151479) + (perceptron\_layer\_1\_output\_7\*-0.0232102) + (perceptron\_layer\_1\_output\_8\*1.12721) + (perceptron\_layer\_1\_output\_9\*-0.163324) );

perceptron\_layer\_2\_output\_1 = ( 0.596161 + (perceptron\_layer\_1\_output\_0\*-0.154287) + (perceptron\_layer\_1\_output\_1\*-0.293931) + (perceptron\_layer\_1\_output\_2\*0.134578) + (perceptron\_layer\_1\_output\_3\*0.186548) + (perceptron\_layer\_1\_output\_4\*0.162356) + (perceptron\_layer\_1\_output\_5\*0.208505) + (perceptron\_layer\_1\_output\_6\*-0.308397) + (perceptron\_layer\_1\_output\_7\*-0.213127) + (perceptron\_layer\_1\_output\_8\*0.956293) + (perceptron\_layer\_1\_output\_9\*-0.187132) );

perceptron\_layer\_2\_output\_2 = ( -0.103605 + (perceptron\_layer\_1\_output\_0\*-0.00466895) + (perceptron\_layer\_1\_output\_1\*0.242357) + (perceptron\_layer\_1\_output\_2\*-0.0261949) + (perceptron\_layer\_1\_output\_3\*-0.254908) + (perceptron\_layer\_1\_output\_4\*0.0445601) + (perceptron\_layer\_1\_output\_5\*0.132919) + (perceptron\_layer\_1\_output\_6\*-0.553429) + (perceptron\_layer\_1\_output\_7\*-0.214923) + (perceptron\_layer\_1\_output\_8\*-0.122888) + (perceptron\_layer\_1\_output\_9\*0.263453) );

perceptron\_layer\_2\_output\_3 = ( 0.633331 + (perceptron\_layer\_1\_output\_0\*-0.332578) + (perceptron\_layer\_1\_output\_1\*-1.03081) + (perceptron\_layer\_1\_output\_2\*0.00279285) + (perceptron\_layer\_1\_output\_3\*0.510729) + (perceptron\_layer\_1\_output\_4\*-0.186513) + (perceptron\_layer\_1\_output\_5\*0.320639) + (perceptron\_layer\_1\_output\_6\*-0.107675) + (perceptron\_layer\_1\_output\_7\*-0.134981) + (perceptron\_layer\_1\_output\_8\*-0.200663) + (perceptron\_layer\_1\_output\_9\*-0.28927) );

perceptron\_layer\_2\_output\_4 = ( 0.6417 + (perceptron\_layer\_1\_output\_0\*-0.213903) + (perceptron\_layer\_1\_output\_1\*-0.0908153) + (perceptron\_layer\_1\_output\_2\*-0.0232336) + (perceptron\_layer\_1\_output\_3\*0.20852) + (perceptron\_layer\_1\_output\_4\*-1.50341) + (perceptron\_layer\_1\_output\_5\*0.039286) + (perceptron\_layer\_1\_output\_6\*0.282915) + (perceptron\_layer\_1\_output\_7\*0.0275298) + (perceptron\_layer\_1\_output\_8\*0.229981) + (perceptron\_layer\_1\_output\_9\*-0.357046) );

perceptron\_layer\_2\_output\_5 = ( 0.751347 + (perceptron\_layer\_1\_output\_0\*-0.0927236) + (perceptron\_layer\_1\_output\_1\*-0.362946) + (perceptron\_layer\_1\_output\_2\*0.096533) + (perceptron\_layer\_1\_output\_3\*0.28526) + (perceptron\_layer\_1\_output\_4\*0.00863145) + (perceptron\_layer\_1\_output\_5\*0.16444) + (perceptron\_layer\_1\_output\_6\*-0.350254) + (perceptron\_layer\_1\_output\_7\*-0.0795655) + (perceptron\_layer\_1\_output\_8\*0.772175) + (perceptron\_layer\_1\_output\_9\*-0.282741) );

perceptron\_layer\_2\_output\_6 = ( 0.484372 + (perceptron\_layer\_1\_output\_0\*-0.319657) + (perceptron\_layer\_1\_output\_1\*-0.0920606) + (perceptron\_layer\_1\_output\_2\*0.00517271) + (perceptron\_layer\_1\_output\_3\*0.325871) + (perceptron\_layer\_1\_output\_4\*0.0514382) + (perceptron\_layer\_1\_output\_5\*0.149318) + (perceptron\_layer\_1\_output\_6\*-0.499416) + (perceptron\_layer\_1\_output\_7\*-0.189042) + (perceptron\_layer\_1\_output\_8\*0.596785) + (perceptron\_layer\_1\_output\_9\*-0.290697) );

perceptron\_layer\_2\_output\_7 = ( -0.0441518 + (perceptron\_layer\_1\_output\_0\*0.129371) + (perceptron\_layer\_1\_output\_1\*0.2543) + (perceptron\_layer\_1\_output\_2\*0.0485011) + (perceptron\_layer\_1\_output\_3\*-0.328509) + (perceptron\_layer\_1\_output\_4\*0.0992037) + (perceptron\_layer\_1\_output\_5\*0.0596742) + (perceptron\_layer\_1\_output\_6\*-0.467206) + (perceptron\_layer\_1\_output\_7\*-0.250818) + (perceptron\_layer\_1\_output\_8\*-0.0614275) + (perceptron\_layer\_1\_output\_9\*0.210164) );

perceptron\_layer\_2\_output\_8 = ( 0.56031 + (perceptron\_layer\_1\_output\_0\*-0.438342) + (perceptron\_layer\_1\_output\_1\*-0.523209) + (perceptron\_layer\_1\_output\_2\*-0.152455) + (perceptron\_layer\_1\_output\_3\*0.594758) + (perceptron\_layer\_1\_output\_4\*-0.181362) + (perceptron\_layer\_1\_output\_5\*0.172872) + (perceptron\_layer\_1\_output\_6\*-0.164124) + (perceptron\_layer\_1\_output\_7\*-0.121192) + (perceptron\_layer\_1\_output\_8\*-0.109463) + (perceptron\_layer\_1\_output\_9\*-0.379682) );

perceptron\_layer\_2\_output\_9 = ( 0.648804 + (perceptron\_layer\_1\_output\_0\*-0.236839) + (perceptron\_layer\_1\_output\_1\*0.0751441) + (perceptron\_layer\_1\_output\_2\*-0.0759383) + (perceptron\_layer\_1\_output\_3\*0.244813) + (perceptron\_layer\_1\_output\_4\*-1.43516) + (perceptron\_layer\_1\_output\_5\*-0.0470345) + (perceptron\_layer\_1\_output\_6\*0.212339) + (perceptron\_layer\_1\_output\_7\*0.0424632) + (perceptron\_layer\_1\_output\_8\*0.244532) + (perceptron\_layer\_1\_output\_9\*-0.384429) );

perceptron\_layer\_2\_output\_10 = ( 0.612824 + (perceptron\_layer\_1\_output\_0\*-0.275081) + (perceptron\_layer\_1\_output\_1\*-0.14517) + (perceptron\_layer\_1\_output\_2\*-0.0338063) + (perceptron\_layer\_1\_output\_3\*0.393134) + (perceptron\_layer\_1\_output\_4\*-0.0590654) + (perceptron\_layer\_1\_output\_5\*0.101806) + (perceptron\_layer\_1\_output\_6\*-0.467208) + (perceptron\_layer\_1\_output\_7\*-0.0761629) + (perceptron\_layer\_1\_output\_8\*0.552657) + (perceptron\_layer\_1\_output\_9\*-0.354647) );

perceptron\_layer\_2\_output\_11 = ( 0.300705 + (perceptron\_layer\_1\_output\_0\*-0.386761) + (perceptron\_layer\_1\_output\_1\*0.219657) + (perceptron\_layer\_1\_output\_2\*-0.0233652) + (perceptron\_layer\_1\_output\_3\*0.306692) + (perceptron\_layer\_1\_output\_4\*0.109972) + (perceptron\_layer\_1\_output\_5\*0.139236) + (perceptron\_layer\_1\_output\_6\*-0.466633) + (perceptron\_layer\_1\_output\_7\*-0.140169) + (perceptron\_layer\_1\_output\_8\*0.53567) + (perceptron\_layer\_1\_output\_9\*-0.341696) );

perceptron\_layer\_2\_output\_12 = ( -0.101229 + (perceptron\_layer\_1\_output\_0\*0.0883752) + (perceptron\_layer\_1\_output\_1\*0.197703) + (perceptron\_layer\_1\_output\_2\*0.0505425) + (perceptron\_layer\_1\_output\_3\*-0.344527) + (perceptron\_layer\_1\_output\_4\*0.0823077) + (perceptron\_layer\_1\_output\_5\*0.0146735) + (perceptron\_layer\_1\_output\_6\*-0.405012) + (perceptron\_layer\_1\_output\_7\*-0.308941) + (perceptron\_layer\_1\_output\_8\*-0.0117186) + (perceptron\_layer\_1\_output\_9\*0.211708) );

perceptron\_layer\_2\_output\_13 = ( 0.424986 + (perceptron\_layer\_1\_output\_0\*-0.373849) + (perceptron\_layer\_1\_output\_1\*-0.0912349) + (perceptron\_layer\_1\_output\_2\*-0.129308) + (perceptron\_layer\_1\_output\_3\*0.487961) + (perceptron\_layer\_1\_output\_4\*-0.0961299) + (perceptron\_layer\_1\_output\_5\*0.168859) + (perceptron\_layer\_1\_output\_6\*-0.0787357) + (perceptron\_layer\_1\_output\_7\*-0.00984418) + (perceptron\_layer\_1\_output\_8\*-0.102349) + (perceptron\_layer\_1\_output\_9\*-0.419328) );

perceptron\_layer\_2\_output\_14 = ( 0.533097 + (perceptron\_layer\_1\_output\_0\*-0.276577) + (perceptron\_layer\_1\_output\_1\*0.184958) + (perceptron\_layer\_1\_output\_2\*-0.0516257) + (perceptron\_layer\_1\_output\_3\*0.220255) + (perceptron\_layer\_1\_output\_4\*-1.34479) + (perceptron\_layer\_1\_output\_5\*-0.0642673) + (perceptron\_layer\_1\_output\_6\*0.229364) + (perceptron\_layer\_1\_output\_7\*0.0873744) + (perceptron\_layer\_1\_output\_8\*0.209736) + (perceptron\_layer\_1\_output\_9\*-0.384628) );

perceptron\_layer\_2\_output\_15 = ( 0.462502 + (perceptron\_layer\_1\_output\_0\*-0.354744) + (perceptron\_layer\_1\_output\_1\*0.0916269) + (perceptron\_layer\_1\_output\_2\*-0.0694819) + (perceptron\_layer\_1\_output\_3\*0.431599) + (perceptron\_layer\_1\_output\_4\*-0.00667381) + (perceptron\_layer\_1\_output\_5\*0.0729328) + (perceptron\_layer\_1\_output\_6\*-0.466928) + (perceptron\_layer\_1\_output\_7\*-0.0767889) + (perceptron\_layer\_1\_output\_8\*0.445009) + (perceptron\_layer\_1\_output\_9\*-0.430915) );

perceptron\_layer\_2\_output\_16 = ( 0.196827 + (perceptron\_layer\_1\_output\_0\*-0.487532) + (perceptron\_layer\_1\_output\_1\*0.406181) + (perceptron\_layer\_1\_output\_2\*-0.0549783) + (perceptron\_layer\_1\_output\_3\*0.322606) + (perceptron\_layer\_1\_output\_4\*0.166495) + (perceptron\_layer\_1\_output\_5\*0.118793) + (perceptron\_layer\_1\_output\_6\*-0.454535) + (perceptron\_layer\_1\_output\_7\*-0.141309) + (perceptron\_layer\_1\_output\_8\*0.533495) + (perceptron\_layer\_1\_output\_9\*-0.419158) );

perceptron\_layer\_2\_output\_17 = ( -0.0682455 + (perceptron\_layer\_1\_output\_0\*0.101216) + (perceptron\_layer\_1\_output\_1\*0.113329) + (perceptron\_layer\_1\_output\_2\*0.0516636) + (perceptron\_layer\_1\_output\_3\*-0.350166) + (perceptron\_layer\_1\_output\_4\*0.0602067) + (perceptron\_layer\_1\_output\_5\*-0.00650541) + (perceptron\_layer\_1\_output\_6\*-0.41271) + (perceptron\_layer\_1\_output\_7\*-0.317063) + (perceptron\_layer\_1\_output\_8\*0.0157194) + (perceptron\_layer\_1\_output\_9\*0.247127) );

perceptron\_layer\_2\_output\_18 = ( 0.332371 + (perceptron\_layer\_1\_output\_0\*-0.386734) + (perceptron\_layer\_1\_output\_1\*0.144965) + (perceptron\_layer\_1\_output\_2\*-0.14192) + (perceptron\_layer\_1\_output\_3\*0.444395) + (perceptron\_layer\_1\_output\_4\*0.00710021) + (perceptron\_layer\_1\_output\_5\*0.220422) + (perceptron\_layer\_1\_output\_6\*-0.0895097) + (perceptron\_layer\_1\_output\_7\*0.101072) + (perceptron\_layer\_1\_output\_8\*-0.127611) + (perceptron\_layer\_1\_output\_9\*-0.440902) );

perceptron\_layer\_2\_output\_19 = ( 0.476077 + (perceptron\_layer\_1\_output\_0\*-0.315775) + (perceptron\_layer\_1\_output\_1\*0.279661) + (perceptron\_layer\_1\_output\_2\*-0.0539868) + (perceptron\_layer\_1\_output\_3\*0.220261) + (perceptron\_layer\_1\_output\_4\*-1.27381) + (perceptron\_layer\_1\_output\_5\*-0.0561788) + (perceptron\_layer\_1\_output\_6\*0.246008) + (perceptron\_layer\_1\_output\_7\*0.11859) + (perceptron\_layer\_1\_output\_8\*0.246665) + (perceptron\_layer\_1\_output\_9\*-0.387505) );

perceptron\_layer\_2\_output\_20 = ( 0.311197 + (perceptron\_layer\_1\_output\_0\*-0.530131) + (perceptron\_layer\_1\_output\_1\*0.308562) + (perceptron\_layer\_1\_output\_2\*-0.11921) + (perceptron\_layer\_1\_output\_3\*0.452457) + (perceptron\_layer\_1\_output\_4\*0.0433208) + (perceptron\_layer\_1\_output\_5\*0.0631601) + (perceptron\_layer\_1\_output\_6\*-0.465893) + (perceptron\_layer\_1\_output\_7\*-0.0720334) + (perceptron\_layer\_1\_output\_8\*0.466857) + (perceptron\_layer\_1\_output\_9\*-0.487175) );

perceptron\_layer\_2\_output\_21 = ( 0.125144 + (perceptron\_layer\_1\_output\_0\*-0.709962) + (perceptron\_layer\_1\_output\_1\*0.275951) + (perceptron\_layer\_1\_output\_2\*-0.0666649) + (perceptron\_layer\_1\_output\_3\*0.370794) + (perceptron\_layer\_1\_output\_4\*0.179683) + (perceptron\_layer\_1\_output\_5\*-0.0223315) + (perceptron\_layer\_1\_output\_6\*-0.565036) + (perceptron\_layer\_1\_output\_7\*-0.183021) + (perceptron\_layer\_1\_output\_8\*0.558563) + (perceptron\_layer\_1\_output\_9\*-0.40082) );

perceptron\_layer\_2\_output\_22 = ( -0.135176 + (perceptron\_layer\_1\_output\_0\*0.0867198) + (perceptron\_layer\_1\_output\_1\*0.141278) + (perceptron\_layer\_1\_output\_2\*0.055838) + (perceptron\_layer\_1\_output\_3\*-0.377102) + (perceptron\_layer\_1\_output\_4\*0.0477032) + (perceptron\_layer\_1\_output\_5\*0.0736793) + (perceptron\_layer\_1\_output\_6\*-0.368953) + (perceptron\_layer\_1\_output\_7\*-0.258769) + (perceptron\_layer\_1\_output\_8\*-0.00855712) + (perceptron\_layer\_1\_output\_9\*0.283299) );

perceptron\_layer\_2\_output\_23 = ( 0.436387 + (perceptron\_layer\_1\_output\_0\*-0.390277) + (perceptron\_layer\_1\_output\_1\*-0.0266522) + (perceptron\_layer\_1\_output\_2\*-0.100109) + (perceptron\_layer\_1\_output\_3\*0.501816) + (perceptron\_layer\_1\_output\_4\*-0.0431542) + (perceptron\_layer\_1\_output\_5\*0.0458818) + (perceptron\_layer\_1\_output\_6\*-0.187641) + (perceptron\_layer\_1\_output\_7\*0.0334009) + (perceptron\_layer\_1\_output\_8\*-0.122079) + (perceptron\_layer\_1\_output\_9\*-0.42973) );

perceptron\_layer\_2\_output\_24 = ( 0.529133 + (perceptron\_layer\_1\_output\_0\*-0.332683) + (perceptron\_layer\_1\_output\_1\*0.218461) + (perceptron\_layer\_1\_output\_2\*-0.0555196) + (perceptron\_layer\_1\_output\_3\*0.259335) + (perceptron\_layer\_1\_output\_4\*-1.24656) + (perceptron\_layer\_1\_output\_5\*-0.141074) + (perceptron\_layer\_1\_output\_6\*0.175652) + (perceptron\_layer\_1\_output\_7\*0.0896225) + (perceptron\_layer\_1\_output\_8\*0.257166) + (perceptron\_layer\_1\_output\_9\*-0.390713) );

perceptron\_layer\_2\_output\_25 = ( 0.262566 + (perceptron\_layer\_1\_output\_0\*-0.633901) + (perceptron\_layer\_1\_output\_1\*0.272133) + (perceptron\_layer\_1\_output\_2\*-0.150627) + (perceptron\_layer\_1\_output\_3\*0.468425) + (perceptron\_layer\_1\_output\_4\*0.0587128) + (perceptron\_layer\_1\_output\_5\*-0.0475191) + (perceptron\_layer\_1\_output\_6\*-0.481957) + (perceptron\_layer\_1\_output\_7\*-0.128334) + (perceptron\_layer\_1\_output\_8\*0.512056) + (perceptron\_layer\_1\_output\_9\*-0.493107) );

perceptron\_layer\_2\_output\_26 = ( 0.186205 + (perceptron\_layer\_1\_output\_0\*-0.774641) + (perceptron\_layer\_1\_output\_1\*0.0370339) + (perceptron\_layer\_1\_output\_2\*-0.0393552) + (perceptron\_layer\_1\_output\_3\*0.440435) + (perceptron\_layer\_1\_output\_4\*0.111924) + (perceptron\_layer\_1\_output\_5\*-0.199175) + (perceptron\_layer\_1\_output\_6\*-0.663026) + (perceptron\_layer\_1\_output\_7\*-0.238327) + (perceptron\_layer\_1\_output\_8\*0.581996) + (perceptron\_layer\_1\_output\_9\*-0.333206) );

perceptron\_layer\_2\_output\_27 = ( -0.221902 + (perceptron\_layer\_1\_output\_0\*0.0977886) + (perceptron\_layer\_1\_output\_1\*0.290483) + (perceptron\_layer\_1\_output\_2\*0.0801369) + (perceptron\_layer\_1\_output\_3\*-0.435497) + (perceptron\_layer\_1\_output\_4\*0.128794) + (perceptron\_layer\_1\_output\_5\*0.112856) + (perceptron\_layer\_1\_output\_6\*-0.292404) + (perceptron\_layer\_1\_output\_7\*-0.230602) + (perceptron\_layer\_1\_output\_8\*-0.00394454) + (perceptron\_layer\_1\_output\_9\*0.2408) );

perceptron\_layer\_2\_output\_28 = ( 0.570096 + (perceptron\_layer\_1\_output\_0\*-0.409022) + (perceptron\_layer\_1\_output\_1\*-0.469899) + (perceptron\_layer\_1\_output\_2\*-0.00377324) + (perceptron\_layer\_1\_output\_3\*0.569282) + (perceptron\_layer\_1\_output\_4\*-0.10191) + (perceptron\_layer\_1\_output\_5\*-0.206366) + (perceptron\_layer\_1\_output\_6\*-0.292181) + (perceptron\_layer\_1\_output\_7\*-0.0747497) + (perceptron\_layer\_1\_output\_8\*-0.0625529) + (perceptron\_layer\_1\_output\_9\*-0.298836) );

perceptron\_layer\_2\_output\_29 = ( 0.589352 + (perceptron\_layer\_1\_output\_0\*-0.252871) + (perceptron\_layer\_1\_output\_1\*0.105941) + (perceptron\_layer\_1\_output\_2\*0.00314619) + (perceptron\_layer\_1\_output\_3\*0.246429) + (perceptron\_layer\_1\_output\_4\*-1.23842) + (perceptron\_layer\_1\_output\_5\*-0.196854) + (perceptron\_layer\_1\_output\_6\*0.174178) + (perceptron\_layer\_1\_output\_7\*0.0821726) + (perceptron\_layer\_1\_output\_8\*0.216) + (perceptron\_layer\_1\_output\_9\*-0.359011) );

perceptron\_layer\_2\_output\_30 = ( 0.303663 + (perceptron\_layer\_1\_output\_0\*-0.652729) + (perceptron\_layer\_1\_output\_1\*0.0780449) + (perceptron\_layer\_1\_output\_2\*-0.122216) + (perceptron\_layer\_1\_output\_3\*0.535273) + (perceptron\_layer\_1\_output\_4\*-0.00240566) + (perceptron\_layer\_1\_output\_5\*-0.16876) + (perceptron\_layer\_1\_output\_6\*-0.567207) + (perceptron\_layer\_1\_output\_7\*-0.170926) + (perceptron\_layer\_1\_output\_8\*0.469881) + (perceptron\_layer\_1\_output\_9\*-0.428561) );

perceptron\_layer\_2\_output\_31 = ( 0.155161 + (perceptron\_layer\_1\_output\_0\*-0.730179) + (perceptron\_layer\_1\_output\_1\*-0.0397704) + (perceptron\_layer\_1\_output\_2\*-0.000705431) + (perceptron\_layer\_1\_output\_3\*0.433752) + (perceptron\_layer\_1\_output\_4\*0.11534) + (perceptron\_layer\_1\_output\_5\*-0.243814) + (perceptron\_layer\_1\_output\_6\*-0.648561) + (perceptron\_layer\_1\_output\_7\*-0.274306) + (perceptron\_layer\_1\_output\_8\*0.468207) + (perceptron\_layer\_1\_output\_9\*-0.299346) );

perceptron\_layer\_2\_output\_32 = ( -0.253668 + (perceptron\_layer\_1\_output\_0\*0.0553226) + (perceptron\_layer\_1\_output\_1\*0.27021) + (perceptron\_layer\_1\_output\_2\*0.10781) + (perceptron\_layer\_1\_output\_3\*-0.472666) + (perceptron\_layer\_1\_output\_4\*0.160711) + (perceptron\_layer\_1\_output\_5\*0.136042) + (perceptron\_layer\_1\_output\_6\*-0.268529) + (perceptron\_layer\_1\_output\_7\*-0.209316) + (perceptron\_layer\_1\_output\_8\*0.0312257) + (perceptron\_layer\_1\_output\_9\*0.227294) );

perceptron\_layer\_2\_output\_33 = ( 0.491955 + (perceptron\_layer\_1\_output\_0\*-0.406924) + (perceptron\_layer\_1\_output\_1\*-0.532375) + (perceptron\_layer\_1\_output\_2\*0.0343631) + (perceptron\_layer\_1\_output\_3\*0.528349) + (perceptron\_layer\_1\_output\_4\*-0.0774815) + (perceptron\_layer\_1\_output\_5\*-0.160527) + (perceptron\_layer\_1\_output\_6\*-0.19966) + (perceptron\_layer\_1\_output\_7\*-0.0968171) + (perceptron\_layer\_1\_output\_8\*-0.0367916) + (perceptron\_layer\_1\_output\_9\*-0.26042) );

perceptron\_layer\_2\_output\_34 = ( 0.629882 + (perceptron\_layer\_1\_output\_0\*-0.123032) + (perceptron\_layer\_1\_output\_1\*0.125966) + (perceptron\_layer\_1\_output\_2\*-0.00825328) + (perceptron\_layer\_1\_output\_3\*0.222614) + (perceptron\_layer\_1\_output\_4\*-1.25002) + (perceptron\_layer\_1\_output\_5\*-0.148869) + (perceptron\_layer\_1\_output\_6\*0.254173) + (perceptron\_layer\_1\_output\_7\*0.0746073) + (perceptron\_layer\_1\_output\_8\*0.2139) + (perceptron\_layer\_1\_output\_9\*-0.313356) );

unscaling\_layer\_output\_0 = 10+0.5\*(perceptron\_layer\_2\_output\_0+1)\*(166-10);

unscaling\_layer\_output\_1 = 4+0.5\*(perceptron\_layer\_2\_output\_1+1)\*(160-4);

unscaling\_layer\_output\_2 = 1+0.5\*(perceptron\_layer\_2\_output\_2+1)\*(249-1);

unscaling\_layer\_output\_3 = 1+0.5\*(perceptron\_layer\_2\_output\_3+1)\*(74-1);

unscaling\_layer\_output\_4 = 0+0.5\*(perceptron\_layer\_2\_output\_4+1)\*(17-0);

unscaling\_layer\_output\_5 = 10+0.5\*(perceptron\_layer\_2\_output\_5+1)\*(166-10);

unscaling\_layer\_output\_6 = 4+0.5\*(perceptron\_layer\_2\_output\_6+1)\*(160-4);

unscaling\_layer\_output\_7 = 1+0.5\*(perceptron\_layer\_2\_output\_7+1)\*(249-1);

unscaling\_layer\_output\_8 = 1+0.5\*(perceptron\_layer\_2\_output\_8+1)\*(74-1);

unscaling\_layer\_output\_9 = 0+0.5\*(perceptron\_layer\_2\_output\_9+1)\*(17-0);

unscaling\_layer\_output\_10 = 10+0.5\*(perceptron\_layer\_2\_output\_10+1)\*(166-10);

unscaling\_layer\_output\_11 = 4+0.5\*(perceptron\_layer\_2\_output\_11+1)\*(160-4);

unscaling\_layer\_output\_12 = 1+0.5\*(perceptron\_layer\_2\_output\_12+1)\*(249-1);

unscaling\_layer\_output\_13 = 2+0.5\*(perceptron\_layer\_2\_output\_13+1)\*(74-2);

unscaling\_layer\_output\_14 = 0+0.5\*(perceptron\_layer\_2\_output\_14+1)\*(17-0);

unscaling\_layer\_output\_15 = 10+0.5\*(perceptron\_layer\_2\_output\_15+1)\*(166-10);

unscaling\_layer\_output\_16 = 4+0.5\*(perceptron\_layer\_2\_output\_16+1)\*(160-4);

unscaling\_layer\_output\_17 = 1+0.5\*(perceptron\_layer\_2\_output\_17+1)\*(249-1);

unscaling\_layer\_output\_18 = 2+0.5\*(perceptron\_layer\_2\_output\_18+1)\*(74-2);

unscaling\_layer\_output\_19 = 0+0.5\*(perceptron\_layer\_2\_output\_19+1)\*(17-0);

unscaling\_layer\_output\_20 = 10+0.5\*(perceptron\_layer\_2\_output\_20+1)\*(166-10);

unscaling\_layer\_output\_21 = 4+0.5\*(perceptron\_layer\_2\_output\_21+1)\*(160-4);

unscaling\_layer\_output\_22 = 1+0.5\*(perceptron\_layer\_2\_output\_22+1)\*(249-1);

unscaling\_layer\_output\_23 = 2+0.5\*(perceptron\_layer\_2\_output\_23+1)\*(74-2);

unscaling\_layer\_output\_24 = 0+0.5\*(perceptron\_layer\_2\_output\_24+1)\*(17-0);

unscaling\_layer\_output\_25 = 10+0.5\*(perceptron\_layer\_2\_output\_25+1)\*(166-10);

unscaling\_layer\_output\_26 = 4+0.5\*(perceptron\_layer\_2\_output\_26+1)\*(160-4);

unscaling\_layer\_output\_27 = 1+0.5\*(perceptron\_layer\_2\_output\_27+1)\*(249-1);

unscaling\_layer\_output\_28 = 2+0.5\*(perceptron\_layer\_2\_output\_28+1)\*(74-2);

unscaling\_layer\_output\_29 = 0+0.5\*(perceptron\_layer\_2\_output\_29+1)\*(17-0);

unscaling\_layer\_output\_30 = 10+0.5\*(perceptron\_layer\_2\_output\_30+1)\*(166-10);

unscaling\_layer\_output\_31 = 4+0.5\*(perceptron\_layer\_2\_output\_31+1)\*(160-4);

unscaling\_layer\_output\_32 = 1+0.5\*(perceptron\_layer\_2\_output\_32+1)\*(249-1);

unscaling\_layer\_output\_33 = 2+0.5\*(perceptron\_layer\_2\_output\_33+1)\*(74-2);

unscaling\_layer\_output\_34 = 0+0.5\*(perceptron\_layer\_2\_output\_34+1)\*(17-0);