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/* MY PROJECT HAS 3 FILES
1)COLOR_DETECTION.PY (CODE)
2)COLORPIC.JPG (COLORFUL IMAGE)
3) COLOR.CSV (DATA SET)
*/
/*-----*/
/*-----COLOR_DETECTION.PY-----*/

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# Dataset - https://github.com/codebrainz/color-names/blob/master/output/colors.csv

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import cv2
import pandas as pd

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img_path = r'C:\Users\user\Desktop\pmp\colorpic.jpg'
img = cv2.imread(img_path)

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# declaring global variables (are used later on)
clicked = False
r = g = b = x_pos = y_pos = 0

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# Reading csv file with pandas and giving names to each column
index = ["color", "color_name", "hex", "R", "G", "B"]
csv = pd.read_csv('colors.csv', names=index, header=None)

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# function to calculate minimum distance from all colors and get the most matching color
def get_color_name(R, G, B):
    minimum = 10000
    for i in range(len(csv)):
        d = abs(R - int(csv.loc[i, "R"])) + abs(G - int(csv.loc[i, "G"])) + abs(B - int(csv.loc[i, "B"]))
        if d <= minimum:
            minimum = d
            cname = csv.loc[i, "color_name"]
    return cname

```

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# function to get x,y coordinates of mouse double click
def draw_function(event, x, y, flags, param):
    if event == cv2.EVENT_LBUTTONDBLCLK:
        global b, g, r, x_pos, y_pos, clicked
        clicked = True
        x_pos = x
        y_pos = y

```

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b, g, r = img[y, x]
b = int(b)
g = int(g)
r = int(r)

cv2.namedWindow('image')
cv2.setMouseCallback('image', draw_function)

while True:

    cv2.imshow("image", img)
    if clicked:

        # cv2.rectangle(image, start point, endpoint, color, thickness)-1 fills entire rectangle
        cv2.rectangle(img, (20, 20), (750, 60), (b, g, r), -1)

        # Creating text string to display( Color name and RGB values )
        text = get_color_name(r, g, b) + ' R=' + str(r) + ' G=' + str(g) + ' B=' + str(b)

        # cv2.putText(img,text,start,font(0-7),fontScale,color,thickness,lineType )
        cv2.putText(img, text, (50, 50), 2, 0.8, (255, 255, 255), 2, cv2.LINE_AA)

        # For very light colours we will display text in black colour
        if r + g + b >= 600:
            cv2.putText(img, text, (50, 50), 2, 0.8, (0, 0, 0), 2, cv2.LINE_AA)

        clicked = False

    # Break the loop when user hits 'esc' key
    if cv2.waitKey(20) & 0xFF == 27:
        break

cv2.destroyAllWindows()

/*-----*/
// colorpic.jpg

```



/\*-----\*/

/\*----- color.csv -----\*/

```
air_force_blue_raf,"Air Force Blue (Raf)",#5d8aa8,93,138,168
air_force_blue_usaf,"Air Force Blue (Usaf)",#00308f,0,48,143
air_superiority_blue,"Air Superiority Blue",#72a0c1,114,160,193
alabama_crimson,"Alabama Crimson",#a32638,163,38,56
alice_blue,"Alice Blue",#f0f8ff,240,248,255
alizarin_crimson,"Alizarin Crimson",#e32636,227,38,54
alloy_orange,"Alloy Orange",#c46210,196,98,16
almond,"Almond",#efdecf,239,222,205
amaranth,"Amaranth",#e52b50,229,43,80
amber,"Amber",#ffbf00,255,191,0
amber_sae_ece,"Amber (Sae/Ece)",#ff7e00,255,126,0
american_rose,"American Rose",#ff033e,255,3,62
amethyst,"Amethyst",#96c,153,102,204
android_green,"Android Green",#a4c639,164,198,57
anti_flash_white,"Anti-Flash White",#f2f3f4,242,243,244
antique_brass,"Antique Brass",#cd9575,205,149,117
antique_fuchsia,"Antique Fuchsia",#915c83,145,92,131
antique_ruby,"Antique Ruby",#841b2d,132,27,45
```

antique\_white,"Antique White",#faebd7,250,235,215  
ao\_english,"Ao (English)",#008000,0,128,0  
apple\_green,"Apple Green",#8db600,141,182,0  
apricot,"Apricot",#fbceb1,251,206,177  
aqua,"Aqua",#0ff,0,255,255  
aquamarine,"Aquamarine",#7fffd4,127,255,212  
army\_green,"Army Green",#4b5320,75,83,32  
arsenic,"Arsenic",#3b444b,59,68,75  
arylide\_yellow,"Arylide Yellow",#e9d66b,233,214,107  
ash\_grey,"Ash Grey",#b2beb5,178,190,181  
asparagus,"Asparagus",#87a96b,135,169,107  
atomic\_tangerine,"Atomic Tangerine",#f96,255,153,102  
auburn,"Auburn",#a52a2a,165,42,42  
aureolin,"Aureolin",#fdee00,253,238,0  
aurometalsaurus,"Aurometalsaurus",#6e7f80,110,127,128  
avocado,"Avocado",#568203,86,130,3  
azure,"Azure",#007fff,0,127,255  
azure\_mist\_web,"Azure Mist/Web",#f0fff,240,255,255  
baby\_blue,"Baby Blue",#89cff0,137,207,240  
baby\_blue\_eyes,"Baby Blue Eyes",#a1caf1,161,202,241  
baby\_pink,"Baby Pink",#f4c2c2,244,194,194  
ball\_blue,"Ball Blue",#21abcd,33,171,205  
banana\_mania,"Banana Mania",#fae7b5,250,231,181  
banana\_yellow,"Banana Yellow",#ffe135,255,225,53  
barn\_red,"Barn Red",#7c0a02,124,10,2  
battleship\_grey,"Battleship Grey",#848482,132,132,130  
bazaar,"Bazaar",#98777b,152,119,123  
beau\_blue,"Beau Blue",#bcd4e6,188,212,230  
beaver,"Beaver",#9f8170,159,129,112  
beige,"Beige",#f5f5dc,245,245,220  
big\_dip\_o\_ruby,"Big Dip O'Ruby",#9c2542,156,37,66  
bisque,"Bisque",#ffe4c4,255,228,196  
bistre,"Bistre",#3d2b1f,61,43,31  
bittersweet,"Bittersweet",#fe6f5e,254,111,94  
bittersweet\_shimmer,"Bittersweet Shimmer",#bf4f51,191,79,81  
black,"Black",#000,0,0,0  
black\_bean,"Black Bean",#3d0c02,61,12,2  
black\_leather\_jacket,"Black Leather Jacket",#253529,37,53,41  
black\_olive,"Black Olive",#3b3c36,59,60,54  
blanched\_almond,"Blanched Almond",#ffebcd,255,235,205  
blast\_off\_bronze,"Blast-Off Bronze",#a57164,165,113,100  
bleu\_de\_france,"Bleu De France",#318ce7,49,140,231  
blizzard\_blue,"Blizzard Blue",#ace5ee,172,229,238  
blond,"Blond",#faf0be,250,240,190

blue,"Blue",#00f,0,0,255  
blue\_bell,"Blue Bell",#a2a2d0,162,162,208  
blue\_crayola,"Blue (Crayola)",#1f75fe,31,117,254  
blue\_gray,"Blue Gray",#69c,102,153,204  
blue\_green,"Blue-Green",#0d98ba,13,152,186  
blue\_munsell,"Blue (Munsell)",#0093af,0,147,175  
blue\_ncs,"Blue (Ncs)",#0087bd,0,135,189  
blue\_pigment,"Blue (Pigment)",#339,51,51,153  
blue\_ryb,"Blue (Ryb)",#0247fe,2,71,254  
blue\_sapphire,"Blue Sapphire",#126180,18,97,128  
blue\_violet,"Blue-Violet",#8a2be2,138,43,226  
blush,"Blush",#de5d83,222,93,131  
bole,"Bole",#79443b,121,68,59  
bondi\_blue,"Bondi Blue",#0095b6,0,149,182  
bone,"Bone",#e3dac9,227,218,201  
boston\_university\_red,"Boston University Red",#c00,204,0,0  
bottle\_green,"Bottle Green",#006a4e,0,106,78  
boysenberry,"Boysenberry",#873260,135,50,96  
brandeis\_blue,"Brandeis Blue",#0070ff,0,112,255  
brass,"Brass",#b5a642,181,166,66  
brick\_red,"Brick Red",#cb4154,203,65,84  
bright\_cerulean,"Bright Cerulean",#1dacd6,29,172,214  
bright\_green,"Bright Green",#6f0,102,255,0  
bright\_lavender,"Bright Lavender",#bf94e4,191,148,228  
bright\_maroon,"Bright Maroon",#c32148,195,33,72  
bright\_pink,"Bright Pink",#ff007f,255,0,127  
bright\_turquoise,"Bright Turquoise",#08e8de,8,232,222  
bright\_ube,"Bright Ube",#d19fe8,209,159,232  
brilliant\_lavender,"Brilliant Lavender",#f4bbff,244,187,255  
brilliant\_rose,"Brilliant Rose",#ff55a3,255,85,163  
brink\_pink,"Brink Pink",#fb607f,251,96,127  
british\_racing\_green,"British Racing Green",#004225,0,66,37  
bronze,"Bronze",#cd7f32,205,127,50  
brown\_traditional,"Brown (Traditional)",#964b00,150,75,0  
brown\_web,"Brown (Web)",#a52a2a,165,42,42  
bubble\_gum,"Bubble Gum",#ffc1cc,255,193,204  
bubbles,"Bubbles",#e7feff,231,254,255  
buff,"Buff",#f0dc82,240,220,130  
bulgarian\_rose,"Bulgarian Rose",#480607,72,6,7  
burgundy,"Burgundy",#800020,128,0,32  
burlywood,"Burlywood",#deb887,222,184,135  
burnt\_orange,"Burnt Orange",#c50,204,85,0  
burnt\_sienna,"Burnt Sienna",#e97451,233,116,81  
burnt\_umber,"Burnt Umber",#8a3324,138,51,36

byzantine,"Byzantine",#bd33a4,189,51,164  
byzantium,"Byzantium",#702963,112,41,99  
cadet,"Cadet",#536872,83,104,114  
cadet\_blue,"Cadet Blue",#5f9ea0,95,158,160  
cadet\_grey,"Cadet Grey",#91a3b0,145,163,176  
cadmium\_green,"Cadmium Green",#006b3c,0,107,60  
cadmium\_orange,"Cadmium Orange",#ed872d,237,135,45  
cadmium\_red,"Cadmium Red",#e30022,227,0,34  
cadmium\_yellow,"Cadmium Yellow",#fff600,255,246,0  
caf\_au\_lait,"Café Au Lait",#a67b5b,166,123,91  
caf\_noir,"Café Noir",#4b3621,75,54,33  
cal\_poly\_green,"Cal Poly Green",#1e4d2b,30,77,43  
cambridge\_blue,"Cambridge Blue",#a3c1ad,163,193,173  
camel,"Camel",#c19a6b,193,154,107  
cameo\_pink,"Cameo Pink",#efbbcc,239,187,204  
camouflage\_green,"Camouflage Green",#78866b,120,134,107  
canary\_yellow,"Canary Yellow",#ffef00,255,239,0  
candy\_apple\_red,"Candy Apple Red",#ff0800,255,8,0  
candy\_pink,"Candy Pink",#e4717a,228,113,122  
capri,"Capri",#00bfff,0,191,255  
caput\_mortuum,"Caput Mortuum",#592720,89,39,32  
cardinal,"Cardinal",#c41e3a,196,30,58  
caribbean\_green,"Caribbean Green",#0c9,0,204,153  
carmine,"Carmine",#960018,150,0,24  
carmine\_m\_p,"Carmine (M&P)",#d70040,215,0,64  
carmine\_pink,"Carmine Pink",#eb4c42,235,76,66  
carmine\_red,"Carmine Red",#ff0038,255,0,56  
carnation\_pink,"Carnation Pink",#ffa6c9,255,166,201  
carnelian,"Carnelian",#b31b1b,179,27,27  
carolina\_blue,"Carolina Blue",#99badd,153,186,221  
carrot\_orange,"Carrot Orange",#ed9121,237,145,33  
catalina\_blue,"Catalina Blue",#062a78,6,42,120  
ceil,"Ceil",#92a1cf,146,161,207  
celadon,"Celadon",#ace1af,172,225,175  
celadon\_blue,"Celadon Blue",#007ba7,0,123,167  
celadon\_green,"Celadon Green",#2f847c,47,132,124  
celeste\_colour,"Celeste (Colour)",#b2ffff,178,255,255  
celestial\_blue,"Celestial Blue",#4997d0,73,151,208  
cerise,"Cerise",#de3163,222,49,99  
cerise\_pink,"Cerise Pink",#ec3b83,236,59,131  
cerulean,"Cerulean",#007ba7,0,123,167  
cerulean\_blue,"Cerulean Blue",#2a52be,42,82,190  
cerulean\_frost,"Cerulean Frost",#6d9bc3,109,155,195  
cg\_blue,"Cg Blue",#007aa5,0,122,165

cg\_red,"Cg Red",#e03c31,224,60,49  
chamoisee,"Chamoisee",#a0785a,160,120,90  
champagne,"Champagne",#fad6a5,250,214,165  
charcoal,"Charcoal",#36454f,54,69,79  
charm\_pink,"Charm Pink",#e68fac,230,143,172  
chartreuse\_traditional,"Chartreuse (Traditional)",#dfff00,223,255,0  
chartreuse\_web,"Chartreuse (Web)",#7fff00,127,255,0  
cherry,"Cherry",#de3163,222,49,99  
cherry\_blossom\_pink,"Cherry Blossom Pink",#ffb7c5,255,183,197  
chestnut,"Chestnut",#cd5c5c,205,92,92  
china\_pink,"China Pink",#de6fa1,222,111,161  
china\_rose,"China Rose",#a8516e,168,81,110  
chinese\_red,"Chinese Red",#aa381e,170,56,30  
chocolate\_traditional,"Chocolate (Traditional)",#7b3f00,123,63,0  
chocolate\_web,"Chocolate (Web)",#d2691e,210,105,30  
chrome\_yellow,"Chrome Yellow",#ffa700,255,167,0  
cinereous,"Cinereous",#98817b,152,129,123  
cinnabar,"Cinnabar",#e34234,227,66,52  
cinnamon,"Cinnamon",#d2691e,210,105,30  
citrine,"Citrine",#e4d00a,228,208,10  
classic\_rose,"Classic Rose",#fbcce7,251,204,231  
cobalt,"Cobalt",#0047ab,0,71,171  
cocoa\_brown,"Cocoa Brown",#d2691e,210,105,30  
coffee,"Coffee",#6f4e37,111,78,55  
columbia\_blue,"Columbia Blue",#9bddff,155,221,255  
congo\_pink,"Congo Pink",#f88379,248,131,121  
cool\_black,"Cool Black",#002e63,0,46,99  
cool\_grey,"Cool Grey",#8c92ac,140,146,172  
copper,"Copper",#b87333,184,115,51  
copper\_crayola,"Copper (Crayola)",#da8a67,218,138,103  
copper\_penny,"Copper Penny",#ad6f69,173,111,105  
copper\_red,"Copper Red",#cb6d51,203,109,81  
copper\_rose,"Copper Rose",#966,153,102,102  
coquelicot,"Coquelicot",#ff3800,255,56,0  
coral,"Coral",#ff7f50,255,127,80  
coral\_pink,"Coral Pink",#f88379,248,131,121  
coral\_red,"Coral Red",#ff4040,255,64,64  
cordovan,"Cordovan",#893f45,137,63,69  
corn,"Corn",#fbec5d,251,236,93  
cornell\_red,"Cornell Red",#b31b1b,179,27,27  
cornflower\_blue,"Cornflower Blue",#6495ed,100,149,237  
cornsilk,"Cornsilk",#fff8dc,255,248,220  
cosmic\_latte,"Cosmic Latte",#fff8e7,255,248,231  
cotton\_candy,"Cotton Candy",#ffbcd9,255,188,217

cream,"Cream",#ffffdd,255,253,208  
crimson,"Crimson",#dc143c,220,20,60  
crimson\_glory,"Crimson Glory",#be0032,190,0,50  
cyan,"Cyan",#0ff,0,255,255  
cyan\_process,"Cyan (Process)",#00b7eb,0,183,235  
daffodil,"Daffodil",#ffff31,255,255,49  
dandelion,"Dandelion",#f0e130,240,225,48  
dark\_blue,"Dark Blue",#00008b,0,0,139  
dark\_brown,"Dark Brown",#654321,101,67,33  
dark\_byzantium,"Dark Byzantium",#5d3954,93,57,84  
dark\_candy\_apple\_red,"Dark Candy Apple Red",#a40000,164,0,0  
dark\_cerulean,"Dark Cerulean",#08457e,8,69,126  
dark\_chestnut,"Dark Chestnut",#986960,152,105,96  
dark\_coral,"Dark Coral",#cd5b45,205,91,69  
dark\_cyan,"Dark Cyan",#008b8b,0,139,139  
dark\_electric\_blue,"Dark Electric Blue",#536878,83,104,120  
dark\_goldenrod,"Dark Goldenrod",#b8860b,184,134,11  
dark\_gray,"Dark Gray",#a9a9a9,169,169,169  
dark\_green,"Dark Green",#013220,1,50,32  
dark\_imperial\_blue,"Dark Imperial Blue",#00416a,0,65,106  
dark\_jungle\_green,"Dark Jungle Green",#1a2421,26,36,33  
dark\_khaki,"Dark Khaki",#bdb76b,189,183,107  
dark\_lava,"Dark Lava",#483c32,72,60,50  
dark\_lavender,"Dark Lavender",#734f96,115,79,150  
dark\_magenta,"Dark Magenta",#8b008b,139,0,139  
dark\_midnight\_blue,"Dark Midnight Blue",#036,0,51,102  
dark\_olive\_green,"Dark Olive Green",#556b2f,85,107,47  
dark\_orange,"Dark Orange",#ff8c00,255,140,0  
dark\_orchid,"Dark Orchid",#9932cc,153,50,204  
dark\_pastel\_blue,"Dark Pastel Blue",#779ecb,119,158,203  
dark\_pastel\_green,"Dark Pastel Green",#03c03c,3,192,60  
dark\_pastel\_purple,"Dark Pastel Purple",#966fd6,150,111,214  
dark\_pastel\_red,"Dark Pastel Red",#c23b22,194,59,34  
dark\_pink,"Dark Pink",#e75480,231,84,128  
dark\_powder\_blue,"Dark Powder Blue",#039,0,51,153  
dark\_raspberry,"Dark Raspberry",#872657,135,38,87  
dark\_red,"Dark Red",#8b0000,139,0,0  
dark\_salmon,"Dark Salmon",#e9967a,233,150,122  
dark\_scarlet,"Dark Scarlet",#560319,86,3,25  
dark\_sea\_green,"Dark Sea Green",#8fbc8f,143,188,143  
dark\_sienna,"Dark Sienna",#3c1414,60,20,20  
dark\_slate\_blue,"Dark Slate Blue",#483d8b,72,61,139  
dark\_slate\_gray,"Dark Slate Gray",#2f4f4f,47,79,79  
dark\_spring\_green,"Dark Spring Green",#177245,23,114,69



dark\_tan,"Dark Tan",#918151,145,129,81  
dark\_tangerine,"Dark Tangerine",#ffa812,255,168,18  
dark\_taupe,"Dark Taupe",#483c32,72,60,50  
dark\_terra\_cotta,"Dark Terra Cotta",#cc4e5c,204,78,92  
dark\_turquoise,"Dark Turquoise",#00ced1,0,206,209  
dark\_violet,"Dark Violet",#9400d3,148,0,211  
dark\_yellow,"Dark Yellow",#9b870c,155,135,12  
dartmouth\_green,"Dartmouth Green",#00703c,0,112,60  
davy\_s\_grey,"Davy'S Grey",#555,85,85,85  
debian\_red,"Debian Red",#d70a53,215,10,83  
deep\_carmine,"Deep Carmine",#a9203e,169,32,62  
deep\_carmine\_pink,"Deep Carmine Pink",#ef3038,239,48,56  
deep\_carrot\_orange,"Deep Carrot Orange",#e9692c,233,105,44  
deep\_cerise,"Deep Cerise",#da3287,218,50,135  
deep\_champagne,"Deep Champagne",#fad6a5,250,214,165  
deep\_chestnut,"Deep Chestnut",#b94e48,185,78,72  
deep\_coffee,"Deep Coffee",#704241,112,66,65  
deep\_fuchsia,"Deep Fuchsia",#c154c1,193,84,193  
deep\_jungle\_green,"Deep Jungle Green",#004b49,0,75,73  
deep\_lilac,"Deep Lilac",#95b,153,85,187  
deep\_magenta,"Deep Magenta",#c0c,204,0,204  
deep\_peach,"Deep Peach",#ffcba4,255,203,164  
deep\_pink,"Deep Pink",#ff1493,255,20,147  
deep\_ruby,"Deep Ruby",#843f5b,132,63,91  
deep\_saffron,"Deep Saffron",#f93,255,153,51  
deep\_sky\_blue,"Deep Sky Blue",#00bfff,0,191,255  
deep\_tuscan\_red,"Deep Tuscan Red",#66424d,102,66,77  
denim,"Denim",#1560bd,21,96,189  
desert,"Desert",#c19a6b,193,154,107  
desert\_sand,"Desert Sand",#edc9af,237,201,175  
dim\_gray,"Dim Gray",#696969,105,105,105  
dodger\_blue,"Dodger Blue",#1e90ff,30,144,255  
dogwood\_rose,"Dogwood Rose",#d71868,215,24,104  
dollar\_bill,"Dollar Bill",#85bb65,133,187,101  
drab,"Drab",#967117,150,113,23  
duke\_blue,"Duke Blue",#00009c,0,0,156  
earth\_yellow,"Earth Yellow",#e1a95f,225,169,95  
ebony,"Ebony",#555d50,85,93,80  
ecru,"Ecru",#c2b280,194,178,128  
eggplant,"Eggplant",#614051,97,64,81  
eggshell,"Eggshell",#f0ead6,240,234,214  
egyptian\_blue,"Egyptian Blue",#1034a6,16,52,166  
electric\_blue,"Electric Blue",#7df9ff,125,249,255  
electric\_crimson,"Electric Crimson",#ff003f,255,0,63

electric\_cyan,"Electric Cyan",#0ff,0,255,255  
electric\_green,"Electric Green",#0f0,0,255,0  
electric\_indigo,"Electric Indigo",#6f00ff,111,0,255  
electric\_lavender,"Electric Lavender",#f4bbff,244,187,255  
electric\_lime,"Electric Lime",#cf0,204,255,0  
electric\_purple,"Electric Purple",#bf00ff,191,0,255  
electric\_ultramarine,"Electric Ultramarine",#3f00ff,63,0,255  
electric\_violet,"Electric Violet",#8f00ff,143,0,255  
electric\_yellow,"Electric Yellow",#ff0,255,255,0  
emerald,"Emerald",#50c878,80,200,120  
english\_lavender,"English Lavender",#b48395,180,131,149  
eton\_blue,"Eton Blue",#96c8a2,150,200,162  
fallow,"Fallow",#c19a6b,193,154,107  
falu\_red,"Falu Red",#801818,128,24,24  
fandango,"Fandango",#b53389,181,51,137  
fashion\_fuchsia,"Fashion Fuchsia",#f400a1,244,0,161  
fawn,"Fawn",#e5aa70,229,170,112  
feldgrau,"Feldgrau",#4d5d53,77,93,83  
fern\_green,"Fern Green",#4f7942,79,121,66  
ferrari\_red,"Ferrari Red",#ff2800,255,40,0  
field\_drab,"Field Drab",#6c541e,108,84,30  
fire\_engine\_red,"Fire Engine Red",#ce2029,206,32,41  
firebrick,"Firebrick",#b22222,178,34,34  
flame,"Flame",#e25822,226,88,34  
flamingo\_pink,"Flamingo Pink",#fc8eac,252,142,172  
flavescent,"Flavescent",#f7e98e,247,233,142  
flax,"Flax",#eedc82,238,220,130  
floral\_white,"Floral White",#fffaf0,255,250,240  
fluorescent\_orange,"Fluorescent Orange",#ffbf00,255,191,0  
fluorescent\_pink,"Fluorescent Pink",#ff1493,255,20,147  
fluorescent\_yellow,"Fluorescent Yellow",#cf0,204,255,0  
folly,"Folly",#ff004f,255,0,79  
forest\_green\_traditional,"Forest Green (Traditional)",#014421,1,68,33  
forest\_green\_web,"Forest Green (Web)",#228b22,34,139,34  
french\_beige,"French Beige",#a67b5b,166,123,91  
french\_blue,"French Blue",#0072bb,0,114,187  
french\_lilac,"French Lilac",#86608e,134,96,142  
french\_lime,"French Lime",#cf0,204,255,0  
french\_raspberry,"French Raspberry",#c72c48,199,44,72  
french\_rose,"French Rose",#f64a8a,246,74,138  
fuchsia,"Fuchsia",#f0f,255,0,255  
fuchsia\_crayola,"Fuchsia (Crayola)",#c154c1,193,84,193  
fuchsia\_pink,"Fuchsia Pink",#f7f,255,119,255  
fuchsia\_rose,"Fuchsia Rose",#c74375,199,67,117

fulvous,"Fulvous",#e48400,228,132,0  
fuzzy\_wuzzy,"Fuzzy Wuzzy",#c66,204,102,102  
gainsboro,"Gainsboro",#dcdcdc,220,220,220  
gamboge,"Gamboge",#e49b0f,228,155,15  
ghost\_white,"Ghost White",#f8f8ff,248,248,255  
ginger,"Ginger",#b06500,176,101,0  
glaucous,"Glaucous",#6082b6,96,130,182  
glitter,"Glitter",#e6e8fa,230,232,250  
gold\_metallic,"Gold (Metallic)",#d4af37,212,175,55  
gold\_web\_golden,"Gold (Web) (Golden)",#ffd700,255,215,0  
golden\_brown,"Golden Brown",#996515,153,101,21  
golden\_poppy,"Golden Poppy",#fcc200,252,194,0  
golden\_yellow,"Golden Yellow",#ffdf00,255,223,0  
goldenrod,"Goldenrod",#daa520,218,165,32  
granny\_smith\_apple,"Granny Smith Apple",#a8e4a0,168,228,160  
gray,"Gray",#808080,128,128,128  
gray\_asparagus,"Gray-Asparagus",#465945,70,89,69  
gray\_html\_css\_gray,"Gray (Html/Css Gray)",#808080,128,128,128  
gray\_x11\_gray,"Gray (X11 Gray)",#bebebe,190,190,190  
green\_color\_wheel\_x11\_green,"Green (Color Wheel) (X11 Green)",#0f0,0,255,0  
green\_crayola,"Green (Crayola)",#1cac78,28,172,120  
green\_html\_css\_green,"Green (Html/Css Green)",#008000,0,128,0  
green\_munsell,"Green (Munsell)",#00a877,0,168,119  
green\_ncs,"Green (Ncs)",#009f6b,0,159,107  
green\_pigment,"Green (Pigment)",#00a550,0,165,80  
green\_ryb,"Green (Ryb)",#66b032,102,176,50  
green\_yellow,"Green-Yellow",#adff2f,173,255,47  
grullo,"Grullo",#a99a86,169,154,134  
guppie\_green,"Guppie Green",#00ff7f,0,255,127  
halay\_be,"Halayà úBe",#663854,102,56,84  
han\_blue,"Han Blue",#446ccf,68,108,207  
han\_purple,"Han Purple",#5218fa,82,24,250  
hansa\_yellow,"Hansa Yellow",#e9d66b,233,214,107  
harlequin,"Harlequin",#3fff00,63,255,0  
harvard\_crimson,"Harvard Crimson",#c90016,201,0,22  
harvest\_gold,"Harvest Gold",#da9100,218,145,0  
heart\_gold,"Heart Gold",#808000,128,128,0  
heliotrope,"Heliotrope",#df73ff,223,115,255  
hollywood\_cerise,"Hollywood Cerise",#f400a1,244,0,161  
honeydew,"Honeydew",#f0fff0,240,255,240  
honolulu\_blue,"Honolulu Blue",#007fbf,0,127,191  
hooker\_s\_green,"Hooker'S Green",#49796b,73,121,107  
hot\_magenta,"Hot Magenta",#ff1dce,255,29,206  
hot\_pink,"Hot Pink",#ff69b4,255,105,180

hunter\_green,"Hunter Green",#355e3b,53,94,59  
iceberg,"Iceberg",#71a6d2,113,166,210  
icterine,"Icterine",#fcf75e,252,247,94  
imperial\_blue,"Imperial Blue",#002395,0,35,149  
inchworm,"Inchworm",#b2ec5d,178,236,93  
india\_green,"India Green",#138808,19,136,8  
indian\_red,"Indian Red",#cd5c5c,205,92,92  
indian\_yellow,"Indian Yellow",#e3a857,227,168,87  
indigo,"Indigo",#6f00ff,111,0,255  
indigo\_dye,"Indigo (Dye)",#00416a,0,65,106  
indigo\_web,"Indigo (Web)",#4b0082,75,0,130  
international\_klein\_blue,"International Klein Blue",#002fa7,0,47,167  
international\_orange\_aerospace,"International Orange (Aerospace)",#ff4f00,255,79,0  
international\_orange\_engineering,"International Orange (Engineering)",#ba160c,186,22,12  
international\_orange\_golden\_gate\_bridge,"International Orange (Golden Gate Bridge)",#c0362c,192,54,44  
iris,"Iris",#5a4fcf,90,79,207  
isabelline,"Isabelline",#f4f0ec,244,240,236  
islamic\_green,"Islamic Green",#009000,0,144,0  
ivory,"Ivory",#fffff0,255,255,240  
jade,"Jade",#00a86b,0,168,107  
jasmine,"Jasmine",#f8de7e,248,222,126  
jasper,"Jasper",#d73b3e,215,59,62  
jazzberry\_jam,"Jazzberry Jam",#a50b5e,165,11,94  
jet,"Jet",#343434,52,52,52  
jonquil,"Jonquil",#fada5e,250,218,94  
june\_bud,"June Bud",#bdda57,189,218,87  
jungle\_green,"Jungle Green",#29ab87,41,171,135  
kelly\_green,"Kelly Green",#4cbb17,76,187,23  
kenyan\_copper,"Kenyan Copper",#7c1c05,124,28,5  
khaki\_html\_css\_khaki,"Khaki (Html/Css) (Khaki)",#c3b091,195,176,145  
khaki\_x11\_light\_khaki,"Khaki (X11) (Light Khaki)",#f0e68c,240,230,140  
ku\_crimson,"Ku Crimson",#e8000d,232,0,13  
la\_salle\_green,"La Salle Green",#087830,8,120,48  
languid\_lavender,"Languid Lavender",#d6cadd,214,202,221  
lapis\_lazuli,"Lapis Lazuli",#26619c,38,97,156  
laser\_lemon,"Laser Lemon",#fefe22,254,254,34  
laurel\_green,"Laurel Green",#a9ba9d,169,186,157  
lava,"Lava",#cf1020,207,16,32  
lavender\_blue,"Lavender Blue",#ccf,204,204,255  
lavender\_blush,"Lavender Blush",#fff0f5,255,240,245  
lavender\_floral,"Lavender (Floral)",#b57edc,181,126,220  
lavender\_gray,"Lavender Gray",#c4c3d0,196,195,208  
lavender\_indigo,"Lavender Indigo",#9457eb,148,87,235

lavender\_magenta,"Lavender Magenta",#ee82ee,238,130,238  
lavender\_mist,"Lavender Mist",#e6e6fa,230,230,250  
lavender\_pink,"Lavender Pink",#fbaed2,251,174,210  
lavender\_purple,"Lavender Purple",#967bb6,150,123,182  
lavender\_rose,"Lavender Rose",#fba0e3,251,160,227  
lavender\_web,"Lavender (Web)",#e6e6fa,230,230,250  
lawn\_green,"Lawn Green",#7cfc00,124,252,0  
lemon,"Lemon",#fff700,255,247,0  
lemon\_chiffon,"Lemon Chiffon",#ffffac,255,250,205  
lemon\_lime,"Lemon Lime",#e3ff00,227,255,0  
licorice,"Licorice",#1a1110,26,17,16  
light\_apricot,"Light Apricot",#fdd5b1,253,213,177  
light\_blue,"Light Blue",#add8e6,173,216,230  
light\_brown,"Light Brown",#b5651d,181,101,29  
light\_carmine\_pink,"Light Carmine Pink",#e66771,230,103,113  
light\_coral,"Light Coral",#f08080,240,128,128  
light\_cornflower\_blue,"Light Cornflower Blue",#93ccea,147,204,234  
light\_crimson,"Light Crimson",#f56991,245,105,145  
light\_cyan,"Light Cyan",#e0ffff,224,255,255  
light\_fuchsia\_pink,"Light Fuchsia Pink",#f984ef,249,132,239  
light\_goldenrod\_yellow,"Light Goldenrod Yellow",#fafad2,250,250,210  
light\_gray,"Light Gray",#d3d3d3,211,211,211  
light\_green,"Light Green",#90ee90,144,238,144  
light\_khaki,"Light Khaki",#f0e68c,240,230,140  
light\_pastel\_purple,"Light Pastel Purple",#b19cd9,177,156,217  
light\_pink,"Light Pink",#ffb6c1,255,182,193  
light\_red\_ochre,"Light Red Ochre",#e97451,233,116,81  
light\_salmon,"Light Salmon",#ffa07a,255,160,122  
light\_salmon\_pink,"Light Salmon Pink",#f99,255,153,153  
light\_sea\_green,"Light Sea Green",#20b2aa,32,178,170  
light\_sky\_blue,"Light Sky Blue",#87cefa,135,206,250  
light\_slate\_gray,"Light Slate Gray",#789,119,136,153  
light\_taupe,"Light Taupe",#b38b6d,179,139,109  
light\_thulian\_pink,"Light Thulian Pink",#e68fac,230,143,172  
light\_yellow,"Light Yellow",#ffffe0,255,255,224  
lilac,"Lilac",#c8a2c8,200,162,200  
lime\_color\_wheel,"Lime (Color Wheel)",#bfff00,191,255,0  
lime\_green,"Lime Green",#32cd32,50,205,50  
lime\_web\_x11\_green,"Lime (Web) (X11 Green)",#0f0,0,255,0  
limerick,"Limerick",#9dc209,157,194,9  
lincoln\_green,"Lincoln Green",#195905,25,89,5  
linen,"Linen",#faf0e6,250,240,230  
lion,"Lion",#c19a6b,193,154,107  
little\_boy\_blue,"Little Boy Blue",#6ca0dc,108,160,220

liver,"Liver",#534b4f,83,75,79  
lust,"Lust",#e62020,230,32,32  
magenta,"Magenta",#f0f,255,0,255  
magenta\_dye,"Magenta (Dye)",#ca1f7b,202,31,123  
magenta\_process,"Magenta (Process)",#ff0090,255,0,144  
magic\_mint,"Magic Mint",#aaf0d1,170,240,209  
magnolia,"Magnolia",#f8f4ff,248,244,255  
mahogany,"Mahogany",#c04000,192,64,0  
maize,"Maize",#fbec5d,251,236,93  
majorelle\_blue,"Majorelle Blue",#6050dc,96,80,220  
malachite,"Malachite",#0bda51,11,218,81  
manatee,"Manatee",#979aaa,151,154,170  
mango\_tango,"Mango Tango",#ff8243,255,130,67  
mantis,"Mantis",#74c365,116,195,101  
mardi\_gras,"Mardi Gras",#880085,136,0,133  
maroon\_crayola,"Maroon (Crayola)",#c32148,195,33,72  
maroon\_html\_css,"Maroon (Html/Css)",#800000,128,0,0  
maroon\_x11,"Maroon (X11)",#b03060,176,48,96  
mauve,"Mauve",#e0b0ff,224,176,255  
mauve\_taupe,"Mauve Taupe",#915f6d,145,95,109  
mauvelous,"Mauvelous",#ef98aa,239,152,170  
maya\_blue,"Maya Blue",#73c2fb,115,194,251  
meat\_brown,"Meat Brown",#e5b73b,229,183,59  
medium\_aquamarine,"Medium Aquamarine",#6da,102,221,170  
medium\_blue,"Medium Blue",#0000cd,0,0,205  
medium\_candy\_apple\_red,"Medium Candy Apple Red",#e2062c,226,6,44  
medium\_carmine,"Medium Carmine",#af4035,175,64,53  
medium\_champagne,"Medium Champagne",#f3e5ab,243,229,171  
medium\_electric\_blue,"Medium Electric Blue",#035096,3,80,150  
medium\_jungle\_green,"Medium Jungle Green",#1c352d,28,53,45  
medium\_lavender\_magenta,"Medium Lavender Magenta",#dda0dd,221,160,221  
medium\_orchid,"Medium Orchid",#ba55d3,186,85,211  
medium\_persian\_blue,"Medium Persian Blue",#0067a5,0,103,165  
medium\_purple,"Medium Purple",#9370db,147,112,219  
medium\_red\_violet,"Medium Red-Violet",#bb3385,187,51,133  
medium\_ruby,"Medium Ruby",#aa4069,170,64,105  
medium\_sea\_green,"Medium Sea Green",#3cb371,60,179,113  
medium\_slate\_blue,"Medium Slate Blue",#7b68ee,123,104,238  
medium\_spring\_bud,"Medium Spring Bud",#c9dc87,201,220,135  
medium\_spring\_green,"Medium Spring Green",#00fa9a,0,250,154  
medium\_taupe,"Medium Taupe",#674c47,103,76,71  
medium\_turquoise,"Medium Turquoise",#48d1cc,72,209,204  
medium\_tuscan\_red,"Medium Tuscan Red",#79443b,121,68,59  
medium\_vermilion,"Medium Vermilion",#d9603b,217,96,59

medium\_violet\_red,"Medium Violet-Red",#c71585,199,21,133  
mellow\_apricot,"Mellow Apricot",#f8b878,248,184,120  
mellow\_yellow,"Mellow Yellow",#f8de7e,248,222,126  
melon,"Melon",#fdbcb4,253,188,180  
midnight\_blue,"Midnight Blue",#191970,25,25,112  
midnight\_green\_eagle\_green,"Midnight Green (Eagle Green)",#004953,0,73,83  
mikado\_yellow,"Mikado Yellow",#ffc40c,255,196,12  
mint,"Mint",#3eb489,62,180,137  
mint\_cream,"Mint Cream",#f5fffa,245,255,250  
mint\_green,"Mint Green",#98ff98,152,255,152  
misty\_rose,"Misty Rose",#ffe4e1,255,228,225  
moccasin,"Moccasin",#faebd7,250,235,215  
mode\_beige,"Mode Beige",#967117,150,113,23  
moonstone\_blue,"Moonstone Blue",#73a9c2,115,169,194  
mordant\_red\_19,"Mordant Red 19",#ae0c00,174,12,0  
moss\_green,"Moss Green",#addfad,173,223,173  
mountain\_meadow,"Mountain Meadow",#30ba8f,48,186,143  
mountbatten\_pink,"Mountbatten Pink",#997a8d,153,122,141  
msu\_green,"Msu Green",#18453b,24,69,59  
mulberry,"Mulberry",#c54b8c,197,75,140  
mustard,"Mustard",#ffdb58,255,219,88  
myrtle,"Myrtle",#21421e,33,66,30  
nadeshiko\_pink,"Nadeshiko Pink",#f6adc6,246,173,198  
napier\_green,"Napier Green",#2a8000,42,128,0  
naples\_yellow,"Naples Yellow",#fada5e,250,218,94  
navajo\_white,"Navajo White",#ffdead,255,222,173  
navy\_blue,"Navy Blue",#000080,0,0,128  
neon\_carrot,"Neon Carrot",#ffa343,255,163,67  
neon\_fuchsia,"Neon Fuchsia",#fe4164,254,65,100  
neon\_green,"Neon Green",#39ff14,57,255,20  
new\_york\_pink,"New York Pink",#d7837f,215,131,127  
non\_photo\_blue,"Non-Photo Blue",#a4dded,164,221,237  
north\_texas\_green,"North Texas Green",#059033,5,144,51  
ocean\_boat\_blue,"Ocean Boat Blue",#0077be,0,119,190  
ochre,"Ochre",#c72,204,119,34  
office\_green,"Office Green",#008000,0,128,0  
old\_gold,"Old Gold",#cfb53b,207,181,59  
old\_lace,"Old Lace",#fdf5e6,253,245,230  
old\_lavender,"Old Lavender",#796878,121,104,120  
old\_mauve,"Old Mauve",#673147,103,49,71  
old\_rose,"Old Rose",#c08081,192,128,129  
olive,"Olive",#808000,128,128,0  
olive\_drab\_7,"Olive Drab #7",#3c341f,60,52,31  
olive\_drab\_web\_olive\_drab\_3,"Olive Drab (Web) (Olive Drab #3)",#6b8e23,107,142,35

olivine,"Olivine",#9ab973,154,185,115  
onyx,"Onyx",#353839,53,56,57  
opera\_mauve,"Opera Mauve",#b784a7,183,132,167  
orange\_color\_wheel,"Orange (Color Wheel)",#ff7f00,255,127,0  
orange\_peel,"Orange Peel",#ff9f00,255,159,0  
orange\_red,"Orange-Red",#ff4500,255,69,0  
orange\_ryb,"Orange (Ryb)",#fb9902,251,153,2  
orange\_web\_color,"Orange (Web Color)",#ffa500,255,165,0  
orchid,"Orchid",#da70d6,218,112,214  
otter\_brown,"Otter Brown",#654321,101,67,33  
ou\_crimson\_red,"Ou Crimson Red",#900,153,0,0  
outer\_space,"Outer Space",#414a4c,65,74,76  
outrageous\_orange,"Outrageous Orange",#ff6e4a,255,110,74  
oxford\_blue,"Oxford Blue",#002147,0,33,71  
pakistan\_green,"Pakistan Green",#060,0,102,0  
palatinate\_blue,"Palatinate Blue",#273be2,39,59,226  
palatinate\_purple,"Palatinate Purple",#682860,104,40,96  
pale\_aqua,"Pale Aqua",#bcd4e6,188,212,230  
pale\_blue,"Pale Blue",#afeeee,175,238,238  
pale\_brown,"Pale Brown",#987654,152,118,84  
pale\_carmine,"Pale Carmine",#af4035,175,64,53  
pale\_cerulean,"Pale Cerulean",#9bc4e2,155,196,226  
pale\_chestnut,"Pale Chestnut",#ddadaf,221,173,175  
pale\_copper,"Pale Copper",#da8a67,218,138,103  
pale\_cornflower\_blue,"Pale Cornflower Blue",#abcdef,171,205,239  
pale\_gold,"Pale Gold",#e6be8a,230,190,138  
pale\_goldenrod,"Pale Goldenrod",#eee8aa,238,232,170  
pale\_green,"Pale Green",#98fb98,152,251,152  
pale\_lavender,"Pale Lavender",#dcd0ff,220,208,255  
pale\_magenta,"Pale Magenta",#f984e5,249,132,229  
pale\_pink,"Pale Pink",#fadadd,250,218,221  
pale\_plum,"Pale Plum",#dda0dd,221,160,221  
pale\_red\_violet,"Pale Red-Violet",#db7093,219,112,147  
pale\_robin\_egg\_blue,"Pale Robin Egg Blue",#96ded1,150,222,209  
pale\_silver,"Pale Silver",#c9c0bb,201,192,187  
pale\_spring\_bud,"Pale Spring Bud",#ecebba,236,235,189  
pale\_taupe,"Pale Taupe",#bc987e,188,152,126  
pale\_violet\_red,"Pale Violet-Red",#db7093,219,112,147  
pansy\_purple,"Pansy Purple",#78184a,120,24,74  
papaya\_whip,"Papaya Whip",#ffefd5,255,239,213  
paris\_green,"Paris Green",#50c878,80,200,120  
pastel\_blue,"Pastel Blue",#aec6cf,174,198,207  
pastel\_brown,"Pastel Brown",#836953,131,105,83  
pastel\_gray,"Pastel Gray",#cfcfc4,207,207,196



pastel\_green,"Pastel Green",#7d7,119,221,119  
pastel\_magenta,"Pastel Magenta",#f49ac2,244,154,194  
pastel\_orange,"Pastel Orange",#ffb347,255,179,71  
pastel\_pink,"Pastel Pink",#dea5a4,222,165,164  
pastel\_purple,"Pastel Purple",#b39eb5,179,158,181  
pastel\_red,"Pastel Red",#ff6961,255,105,97  
pastel\_violet,"Pastel Violet",#cb99c9,203,153,201  
pastel\_yellow,"Pastel Yellow",#fdfd96,253,253,150  
patriarch,"Patriarch",#800080,128,0,128  
payne\_s\_grey,"Payne'S Grey",#536878,83,104,120  
peach,"Peach",#ffe5b4,255,229,180  
peach\_crayola,"Peach (Crayola)",#ffcba4,255,203,164  
peach\_orange,"Peach-Orange",#fc9,255,204,153  
peach\_puff,"Peach Puff",#ffdab9,255,218,185  
peach\_yellow,"Peach-Yellow",#fadfad,250,223,173  
pear,"Pear",#d1e231,209,226,49  
pearl,"Pearl",#eae0c8,234,224,200  
pearl\_aqua,"Pearl Aqua",#88d8c0,136,216,192  
pearly\_purple,"Pearly Purple",#b768a2,183,104,162  
peridot,"Peridot",#e6e200,230,226,0  
periwinkle,"Periwinkle",#ccf,204,204,255  
persian\_blue,"Persian Blue",#1c39bb,28,57,187  
persian\_green,"Persian Green",#00a693,0,166,147  
persian\_indigo,"Persian Indigo",#32127a,50,18,122  
persian\_orange,"Persian Orange",#d99058,217,144,88  
persian\_pink,"Persian Pink",#f77fbe,247,127,190  
persian\_plum,"Persian Plum",#701c1c,112,28,28  
persian\_red,"Persian Red",#c33,204,51,51  
persian\_rose,"Persian Rose",#fe28a2,254,40,162  
persimmon,"Persimmon",#ec5800,236,88,0  
peru,"Peru",#cd853f,205,133,63  
phlox,"Phlox",#df00ff,223,0,255  
phthalo\_blue,"Phthalo Blue",#000f89,0,15,137  
phthalo\_green,"Phthalo Green",#123524,18,53,36  
piggy\_pink,"Piggy Pink",#fddde6,253,221,230  
pine\_green,"Pine Green",#01796f,1,121,111  
pink,"Pink",#ffc0cb,255,192,203  
pink\_lace,"Pink Lace",#ffddf4,255,221,244  
pink\_orange,"Pink-Orange",#f96,255,153,102  
pink\_pearl,"Pink Pearl",#e7accf,231,172,207  
pink\_sherbet,"Pink Sherbet",#f78fa7,247,143,167  
pistachio,"Pistachio",#93c572,147,197,114  
platinum,"Platinum",#e5e4e2,229,228,226  
plum\_traditional,"Plum (Traditional)",#8e4585,142,69,133

plum\_web,"Plum (Web)",#dda0dd,221,160,221  
portland\_orange,"Portland Orange",#ff5a36,255,90,54  
powder\_blue\_web,"Powder Blue (Web)",#b0e0e6,176,224,230  
princeton\_orange,"Princeton Orange",#ff8f00,255,143,0  
prune,"Prune",#701c1c,112,28,28  
prussian\_blue,"Prussian Blue",#003153,0,49,83  
psychedelic\_purple,"Psychedelic Purple",#df00ff,223,0,255  
puce,"Puce",#c89,204,136,153  
pumpkin,"Pumpkin",#ff7518,255,117,24  
purple\_heart,"Purple Heart",#69359c,105,53,156  
purple\_html\_css,"Purple (Html/Css)",#800080,128,0,128  
purple\_mountain\_majesty,"Purple Mountain Majesty",#9678b6,150,120,182  
purple\_munsell,"Purple (Munsell)",#9f00c5,159,0,197  
purple\_pizzazz,"Purple Pizzazz",#fe4eda,254,78,218  
purple\_taupe,"Purple Taupe",#50404d,80,64,77  
purple\_x11,"Purple (X11)",#a020f0,160,32,240  
quartz,"Quartz",#51484f,81,72,79  
rackley,"Rackley",#5d8aa8,93,138,168  
radical\_red,"Radical Red",#ff355e,255,53,94  
rajah,"Rajah",#fbab60,251,171,96  
raspberry,"Raspberry",#e30b5d,227,11,93  
raspberry\_glace,"Raspberry Glace",#915f6d,145,95,109  
raspberry\_pink,"Raspberry Pink",#e25098,226,80,152  
raspberry\_rose,"Raspberry Rose",#b3446c,179,68,108  
raw\_umber,"Raw Umber",#826644,130,102,68  
razzle\_dazzle\_rose,"Razzle Dazzle Rose",#f3c,255,51,204  
razzmatazz,"Razzmatazz",#e3256b,227,37,107  
red,"Red",#f00,255,0,0  
red\_brown,"Red-Brown",#a52a2a,165,42,42  
red\_devil,"Red Devil",#860111,134,1,17  
red\_munsell,"Red (Munsell)",#f2003c,242,0,60  
red\_ncs,"Red (Ncs)",#c40233,196,2,51  
red\_orange,"Red-Orange",#ff5349,255,83,73  
red\_pigment,"Red (Pigment)",#ed1c24,237,28,36  
red\_ryb,"Red (Ryb)",#fe2712,254,39,18  
red\_violet,"Red-Violet",#c71585,199,21,133  
redwood,"Redwood",#ab4e52,171,78,82  
regalia,"Regalia",#522d80,82,45,128  
resolution\_blue,"Resolution Blue",#002387,0,35,135  
rich\_black,"Rich Black",#004040,0,64,64  
rich\_brilliant\_lavender,"Rich Brilliant Lavender",#f1a7fe,241,167,254  
rich\_carmine,"Rich Carmine",#d70040,215,0,64  
rich\_electric\_blue,"Rich Electric Blue",#0892d0,8,146,208  
rich\_lavender,"Rich Lavender",#a76bcf,167,107,207

rich\_lilac,"Rich Lilac",#b666d2,182,102,210  
rich\_maroon,"Rich Maroon",#b03060,176,48,96  
rifle\_green,"Rifle Green",#414833,65,72,51  
robin\_egg\_blue,"Robin Egg Blue",#0cc,0,204,204  
rose,"Rose",#ff007f,255,0,127  
rose\_bonbon,"Rose Bonbon",#f9429e,249,66,158  
rose\_ebony,"Rose Ebony",#674846,103,72,70  
rose\_gold,"Rose Gold",#b76e79,183,110,121  
rose\_madder,"Rose Madder",#e32636,227,38,54  
rose\_pink,"Rose Pink",#f6c,255,102,204  
rose\_quartz,"Rose Quartz",#aa98a9,170,152,169  
rose\_taupe,"Rose Taupe",#905d5d,144,93,93  
rose\_vale,"Rose Vale",#ab4e52,171,78,82  
rosewood,"Rosewood",#65000b,101,0,11  
rosso\_corsa,"Rosso Corsa",#d40000,212,0,0  
rosy\_brown,"Rosy Brown",#bc8f8f,188,143,143  
royal\_azure,"Royal Azure",#0038a8,0,56,168  
royal\_blue\_traditional,"Royal Blue (Traditional)",#002366,0,35,102  
royal\_blue\_web,"Royal Blue (Web)",#4169e1,65,105,225  
royal\_fuchsia,"Royal Fuchsia",#ca2c92,202,44,146  
royal\_purple,"Royal Purple",#7851a9,120,81,169  
royal\_yellow,"Royal Yellow",#fada5e,250,218,94  
rubine\_red,"Rubine Red",#d10056,209,0,86  
ruby,"Ruby",#e0115f,224,17,95  
ruby\_red,"Ruby Red",#9b111e,155,17,30  
ruddy,"Ruddy",#ff0028,255,0,40  
ruddy\_brown,"Ruddy Brown",#bb6528,187,101,40  
ruddy\_pink,"Ruddy Pink",#e18e96,225,142,150  
rufous,"Rufous",#a81c07,168,28,7  
russet,"Russet",#80461b,128,70,27  
rust,"Rust",#b7410e,183,65,14  
rusty\_red,"Rusty Red",#da2c43,218,44,67  
sacramento\_state\_green,"Sacramento State Green",#00563f,0,86,63  
saddle\_brown,"Saddle Brown",#8b4513,139,69,19  
safety\_orange\_blaze\_orange,"Safety Orange (Blaze Orange)",#ff6700,255,103,0  
saffron,"Saffron",#f4c430,244,196,48  
salmon,"Salmon",#ff8c69,255,140,105  
salmon\_pink,"Salmon Pink",#ff91a4,255,145,164  
sand,"Sand",#c2b280,194,178,128  
sand\_dune,"Sand Dune",#967117,150,113,23  
sandstorm,"Sandstorm",#ecd540,236,213,64  
sandy\_brown,"Sandy Brown",#f4a460,244,164,96  
sandy\_taupe,"Sandy Taupe",#967117,150,113,23  
sangria,"Sangria",#92000a,146,0,10

sap\_green,"Sap Green",#507d2a,80,125,42  
sapphire,"Sapphire",#0f52ba,15,82,186  
sapphire\_blue,"Sapphire Blue",#0067a5,0,103,165  
satin\_sheen\_gold,"Satin Sheen Gold",#cba135,203,161,53  
scarlet,"Scarlet",#ff2400,255,36,0  
scarlet\_crayola,"Scarlet (Crayola)",#fd0e35,253,14,53  
school\_bus\_yellow,"School Bus Yellow",#ffd800,255,216,0  
screamin\_green,"Screamin' Green",#76ff7a,118,255,122  
sea\_blue,"Sea Blue",#006994,0,105,148  
sea\_green,"Sea Green",#2e8b57,46,139,87  
seal\_brown,"Seal Brown",#321414,50,20,20  
seashell,"Seashell",#fff5ee,255,245,238  
selective\_yellow,"Selective Yellow",#ffba00,255,186,0  
sepia,"Sepia",#704214,112,66,20  
shadow,"Shadow",#8a795d,138,121,93  
shamrock\_green,"Shamrock Green",#009e60,0,158,96  
shocking\_pink,"Shocking Pink",#fc0fc0,252,15,192  
shocking\_pink\_crayola,"Shocking Pink (Crayola)",#ff6fff,255,111,255  
sienna,"Sienna",#882d17,136,45,23  
silver,"Silver",#c0c0c0,192,192,192  
sinopia,"Sinopia",#cb410b,203,65,11  
skobeloff,"Skobeloff",#007474,0,116,116  
sky\_blue,"Sky Blue",#87ceeb,135,206,235  
sky\_magenta,"Sky Magenta",#cf71af,207,113,175  
slate\_blue,"Slate Blue",#6a5acd,106,90,205  
slate\_gray,"Slate Gray",#708090,112,128,144  
smalt\_dark\_powder\_blue,"Smalt (Dark Powder Blue)",#039,0,51,153  
smokey\_topaz,"Smokey Topaz",#933d41,147,61,65  
smoky\_black,"Smoky Black",#100c08,16,12,8  
snow,"Snow",#ffa5a5,255,250,250  
spiro\_disco\_ball,"Spiro Disco Ball",#0fc0fc,15,192,252  
spring\_bud,"Spring Bud",#a7fc00,167,252,0  
spring\_green,"Spring Green",#00ff7f,0,255,127  
st\_patrick\_s\_blue,"St. Patrick'S Blue",#23297a,35,41,122  
steel\_blue,"Steel Blue",#4682b4,70,130,180  
stil\_de\_grain\_yellow,"Stil De Grain Yellow",#fada5e,250,218,94  
stizza,"Stizza",#900,153,0,0  
stormcloud,"Stormcloud",#4f666a,79,102,106  
straw,"Straw",#e4d96f,228,217,111  
sunglow,"Sunglow",#fc3,255,204,51  
sunset,"Sunset",#fad6a5,250,214,165  
tan,"Tan",#d2b48c,210,180,140  
tangelo,"Tangelo",#f94d00,249,77,0  
tangerine,"Tangerine",#f28500,242,133,0

tangerine\_yellow,"Tangerine Yellow",#fc0,255,204,0  
tango\_pink,"Tango Pink",#e4717a,228,113,122  
taupe,"Taupe",#483c32,72,60,50  
taupe\_gray,"Taupe Gray",#8b8589,139,133,137  
tea\_green,"Tea Green",#d0f0c0,208,240,192  
tea\_rose\_orange,"Tea Rose (Orange)",#f88379,248,131,121  
tea\_rose\_rose,"Tea Rose (Rose)",#f4c2c2,244,194,194  
teal,"Teal",#008080,0,128,128  
teal\_blue,"Teal Blue",#367588,54,117,136  
teal\_green,"Teal Green",#00827f,0,130,127  
telemagenta,"Telemagenta",#cf3476,207,52,118  
tenn\_tawny,"Tenné (Tawny)",#cd5700,205,87,0  
terra\_cotta,"Terra Cotta",#e2725b,226,114,91  
thistle,"Thistle",#d8bfd8,216,191,216  
thulian\_pink,"Thulian Pink",#de6fa1,222,111,161  
tickle\_me\_pink,"Tickle Me Pink",#fc89ac,252,137,172  
tiffany\_blue,"Tiffany Blue",#0abab5,10,186,181  
tiger\_s\_eye,"Tiger'S Eye",#e08d3c,224,141,60  
timberwolf,"Timberwolf",#dbd7d2,219,215,210  
titanium\_yellow,"Titanium Yellow",#eee600,238,230,0  
tomato,"Tomato",#ff6347,255,99,71  
toolbox,"Toolbox",#746cc0,116,108,192  
topaz,"Topaz",#ffc87c,255,200,124  
tractor\_red,"Tractor Red",#fd0e35,253,14,53  
trolley\_grey,"Trolley Grey",#808080,128,128,128  
tropical\_rain\_forest,"Tropical Rain Forest",#00755e,0,117,94  
true\_blue,"True Blue",#0073cf,0,115,207  
tufts\_blue,"Tufts Blue",#417dc1,65,125,193  
tumbleweed,"Tumbleweed",#deaa88,222,170,136  
turkish\_rose,"Turkish Rose",#b57281,181,114,129  
turquoise,"Turquoise",#30d5c8,48,213,200  
turquoise\_blue,"Turquoise Blue",#00ffef,0,255,239  
turquoise\_green,"Turquoise Green",#a0d6b4,160,214,180  
tuscan\_red,"Tuscan Red",#7c4848,124,72,72  
twilight\_lavender,"Twilight Lavender",#8a496b,138,73,107  
tyrian\_purple,"Tyrian Purple",#66023c,102,2,60  
ua\_blue,"Ua Blue",#03a,0,51,170  
ua\_red,"Ua Red",#d9004c,217,0,76  
ube,"Ube",#8878c3,136,120,195  
ucla\_blue,"Ucla Blue",#536895,83,104,149  
ucla\_gold,"Ucla Gold",#ffb300,255,179,0  
ufo\_green,"Ufo Green",#3cd070,60,208,112  
ultra\_pink,"Ultra Pink",#ff6fff,255,111,255  
ultramarine,"Ultramarine",#120a8f,18,10,143

ultramarine\_blue,"Ultramarine Blue",#4166f5,65,102,245  
umber,"Umbra",#635147,99,81,71  
unbleached\_silk,"Unbleached Silk",#ffddca,255,221,202  
united\_nations\_blue,"United Nations Blue",#5b92e5,91,146,229  
university\_of\_california\_gold,"University Of California Gold",#b78727,183,135,39  
unmellow\_yellow,"Unmellow Yellow",#ff6,255,255,102  
up\_forest\_green,"Up Forest Green",#014421,1,68,33  
up\_maroon,"Up Maroon",#7b1113,123,17,19  
upsdell\_red,"Upsdell Red",#ae2029,174,32,41  
urobilin,"Urobilin",#e1ad21,225,173,33  
usafa\_blue,"Usafa Blue",#004f98,0,79,152  
usc\_cardinal,"Usc Cardinal",#900,153,0,0  
usc\_gold,"Usc Gold",#fc0,255,204,0  
utah\_crimson,"Utah Crimson",#d3003f,211,0,63  
vanilla,"Vanilla",#f3e5ab,243,229,171  
vegas\_gold,"Vegas Gold",#c5b358,197,179,88  
venetian\_red,"Venetian Red",#c80815,200,8,21  
verdigris,"Verdigris",#43b3ae,67,179,174  
vermillion\_cinnabar,"Vermilion (Cinnabar)",#e34234,227,66,52  
vermillion\_plochere,"Vermilion (Plochere)",#d9603b,217,96,59  
veronica,"Veronica",#a020f0,160,32,240  
violet,"Violet",#8f00ff,143,0,255  
violet\_blue,"Violet-Blue",#324ab2,50,74,178  
violet\_color\_wheel,"Violet (Color Wheel)",#7f00ff,127,0,255  
violet\_ryb,"Violet (Ryb)",#8601af,134,1,175  
violet\_web,"Violet (Web)",#ee82ee,238,130,238  
viridian,"Viridian",#40826d,64,130,109  
vivid\_auburn,"Vivid Auburn",#922724,146,39,36  
vivid\_burgundy,"Vivid Burgundy",#9f1d35,159,29,53  
vivid\_cerise,"Vivid Cerise",#da1d81,218,29,129  
vivid\_tangerine,"Vivid Tangerine",#ffa089,255,160,137  
vivid\_violet,"Vivid Violet",#9f00ff,159,0,255  
warm\_black,"Warm Black",#004242,0,66,66  
waterspout,"Waterspout",#a4f4f9,164,244,249  
wenge,"Wenge",#645452,100,84,82  
wheat,"Wheat",#f5deb3,245,222,179  
white,"White",#fff,255,255,255  
white\_smoke,"White Smoke",#f5f5f5,245,245,245  
wild\_blue\_yonder,"Wild Blue Yonder",#a2add0,162,173,208  
wild\_strawberry,"Wild Strawberry",#ff43a4,255,67,164  
wild\_watermelon,"Wild Watermelon",#fc6c85,252,108,133  
wine,"Wine",#722f37,114,47,55  
wine\_dregs,"Wine Dregs",#673147,103,49,71  
wisteria,"Wisteria",#c9a0dc,201,160,220

wood\_brown,"Wood Brown",#c19a6b,193,154,107  
xanadu,"Xanadu",#738678,115,134,120  
yale\_blue,"Yale Blue",#0f4d92,15,77,146  
yellow,"Yellow",#ff0,255,255,0  
yellow\_green,"Yellow-Green",#9acd32,154,205,50  
yellow\_munsell,"Yellow (Munsell)",#efcc00,239,204,0  
yellow\_ncs,"Yellow (Ncs)",#ffd300,255,211,0  
yellow\_orange,"Yellow Orange",#ffae42,255,174,66  
yellow\_process,"Yellow (Process)",#ffef00,255,239,0  
yellow\_ryb,"Yellow (Ryb)",#fefe33,254,254,51  
zaffre,"Zaffre",#0014a8,0,20,168  
zinnwaldite\_brown,"Zinnwaldite Brown",#2c1608,44,22,8