**CVIČENIE: KRESLI OBRÁZKY (vytvor vlastné obrázky)**

import tkinter, random

canvas = tkinter.Canvas(bg='white', width=300, height=300)

canvas.pack()

sirka = int(canvas['width'])

vyska = int(canvas['height'])

def lodicka(x, y):

canvas.create\_polygon(x, y, x+10, y+20, x+60, y+20, x+70, y, fill='gray')

canvas.create\_line(x+30, y, x+30, y-40, width=5)

canvas.create\_polygon(x+30, y-10, x+60, y-10, x+30, y-40, fill='sky blue')

def balon(x, y):

canvas.create\_rectangle(x, y, x+30, y-20, fill='brown')

canvas.create\_line(x, y-20, x-10, y-50, width=3)

canvas.create\_line(x+30, y-20, x+40, y-50, width=3)

canvas.create\_oval(x-10, y-80, x+40, y-30, fill='violet')

canvas.create\_rectangle(0, vyska/4\*2, sirka, vyska, fill='blue',

outline='navy')

def klik(event):

x, y = event.x, event.y

if y < vyska/4\*2-10:

balon(x, y)

else:

lodicka(x, y)

canvas.bind('<Button-1>', klik)

**ŠTVORČEKOVÁ SIEŤ**

import tkinter, random

canvas = tkinter.Canvas(bg='yellow', width='500', height='500')

canvas.pack()

sirka = int(canvas['width'])

vyska = int(canvas['height'])

x = 0

y = 0

a = 10

for j in range(0, vyska, 10):

for i in range(0, sirka, 10):

canvas.create\_rectangle(x, y, x+a, y+a)

x += a

x = 0

y += a

canvas.create\_rectangle(10, 50, 40,70, fill="red")

canvas.create\_polygon(10, 100, 110, 100,60,20, fill="blue")

x = random.randint(0, sirka)

y = random.randint(0, vyska)

hrubka = random.randint(1, 10)

canvas.create\_rectangle(x, y, x+100, y+100, width=hrubka, fill="green")

# nahodhny kruh

x = random.randint(0, sirka)

y = random.randint(0, vyska)

r = random.randint(10, 50)

hrubka = random.randint(5, 10)

canvas.create\_oval(x-r, y-r, x+r, y+r, fill="grey")

**ROVNAKÉ ČÍSLA ( doplň tretie číslo)**

import tkinter, random

okno = tkinter.Tk()

canvas = tkinter.Canvas(bg='white', width=800, height=400)

canvas.pack()

sirka = int(canvas['width'])

vyska = int(canvas['height'])

body = 0

def animacia():

global cislo1, cislo2

canvas.delete('all')

cislo1 = random.randint(1, 6)

cislo2 = random.randint(1, 6)

canvas.create\_text(sirka/4, vyska/4, text=str(cislo1),

font='Arial 100 bold', fill='red')

canvas.create\_text(sirka/4\*3, vyska/4, text=str(cislo2),

font='Arial 100 bold', fill='red')

canvas.after(1000, animacia)

def porovnaj():

global cislo1, cislo2, rovnake, body

if cislo1 == cislo2:

body += 2

canvas.create\_text(100, 10, text='Získané body: '+

str(body), font='Arial, 10', fill='navy')

else:

body -= 1

canvas.create\_text(100, 10, text='Získané body: '+

str(body), font='Arial, 10', fill='navy')

animacia()

tlacidlo = tkinter.Button(okno, text='ROVNAKÉ', command=porovnaj)

tlacidlo.pack()