

# Creating computer programs in Python



## Beginner level

Materials prepared by the department  
of methodological development department



# Notepad. Part 2.

## Working with files

To open a file, the construction with `open()` is used, to which you must pass the path to the file. If the file is located in the same folder as the program, then only the full name of the file is specified (along with the extension, for example, "file.txt")

After with `open()`, specify the name of the variable in which the file will be written. A colon is placed at the end, and on the next line, with an indent of 4 spaces, you can do something with the opened file. For example, print it out. But before that you need to read its contents with the `read` command:

with `open("file.txt")` as file:

```
print(file.read()) # prints out the contents of the file
```

If you want to write something to the file, add another parameter in the brackets of the open command: "w" (to completely overwrite the contents of the file) or "a" (to add new text to the existing one). The command write is used to write to the file:

with open("file.txt", "w") as file:

```
print(file.write('New text')) # will replace the contents of the file with "New text"
```

with open("file.txt", "a") as file:

```
print(file.write('New text')) # will add "New text" to the end of the file
```

If the file has encoding problems, another parameter of the open command → encoding → will help. It can be set to "utf-8" or "windows-1251".

```
with open ( path_to_the_file ) as file
```

Opening a file for reading and writing it to the file variable.

```
with open ( path_to_the_file, 'w' ) as file
```

Opening a file to overwrite.

```
with open ( path_to_the_file, 'a' ) as file
```

Opening a file to add text at the end.

```
file.read()
```

Reading from a file.

```
file.write('Some text')
```

Writing to a file.

```
file_menu.add_command(label='Open', image=open_file_icon, compound='left',  
command=open_file)
```

Adding a command (open\_file function) to a menu item.

```
import tkinterFileDialog as tfd
```

Library for working with dialog boxes.

```
tfd.askopenfilename()
```

Creating a window for selecting a file

```
tfd.asksaveasfilename()
```

Creating a window for saving a file