Full title of the thesis/project

Semestral/Bachelor/Master's thesis

Given name SURNAME
email@address

Department of Radio Electronics
Brno University of Technology, Czechia

Brno, December 8, 2020

FACULTY OF ELECTRICAL department
ENGINEERING of radio electronics
AND COMMUNICATION

Unordered list

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Ordered list

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Block

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Example block

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Alert block

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Figure 1: Your caption.

```latex
\begin{table}
    \centering
    \caption{Your caption.}
    \begin{tabular}{l | c | c | r}
        \hline
        \textbf{ID} & \textbf{Duration} & \textbf{Complexity} & \textbf{Score}\\
        \hline
        Algo 1 & 0.0159 & 0.50 & 78\\
        Algo 2 & 0.0453 & 0.65 & 88\\
        Algo 3 & 0.8642 & 0.77 & 95\\
        \hline
    \end{tabular}
\end{table}
```

Table 1: Your caption.

ID	Duration	Complexity	Score
Algo 1	0.0159	0.50	78
Algo 2	0.0453	0.65	88
Algo 3	0.8642	0.77	95

Pythagorean theorem can be written in one short equation as: $a^2 + b^2 = c^2$ where c is the longest side of the triangle, a and b are the other two sides.

Other useful equations (thank you *John Napier*):

$$\log_b(x^p) = p \cdot \log_b(x) \tag{1}$$

$$\log_b(x) = y \quad \text{exactly if} \quad b^y = x$$

Code listings

C example

```c
for (uint8_t i = 0; i < LENGTH; i++)
{
    // Test LSB of "segments"
    if ((segments & 0x01) == 0)
        GPIO_write_low(&PORTB, SEGMENT_DATA);
    else
        GPIO_write_high(&PORTB, SEGMENT_DATA);
    // One clock
    SEG_clk_2us();
    // Shift "segments"
    segments = segments >> 1;
}
```

Listing 1: Matlab example

```matlab
x = 0:0.05:5;
y = sin(x.^2);
figure
% Simple line plot of x and y values
plot(x,y)
```

VHDL example

```vhdl
1
2 -- Entity declaration for hexadecimal to seven-segment decoder
3
4 entity hex_7seg is
5     port(
6         hex_i: in  std_logic_vector(4 - 1 downto 0);
7         seg_o: out std_logic_vector(7 - 1 downto 0)
8     );
9 end entity hex_7seg;
```

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- Etiam sapien elit, consequat eget, tristique non, venenatis quis, ante.
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Question 1

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Answer 1

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