

TUGAS POLINOMIAL CHAPTER 15

Tugas Mata Kuliah SK5003 Pemrograman dalam Sains
Numpy Python 3

Mohammad Rizka Fadhli (Ikang)
20921004@mahasiswa.itb.ac.id

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TASK 1

Soal

15.1 Develop a Python program to evaluate polynomial function $y = x^4 + 4x^2 + 7$. Find an appropriate interval of x for which the function evaluation is done and plot the graph.

15.4 Develop a Python program to solve the polynomial function $y = x^4 + 4x^2 + 7$.

Jawab

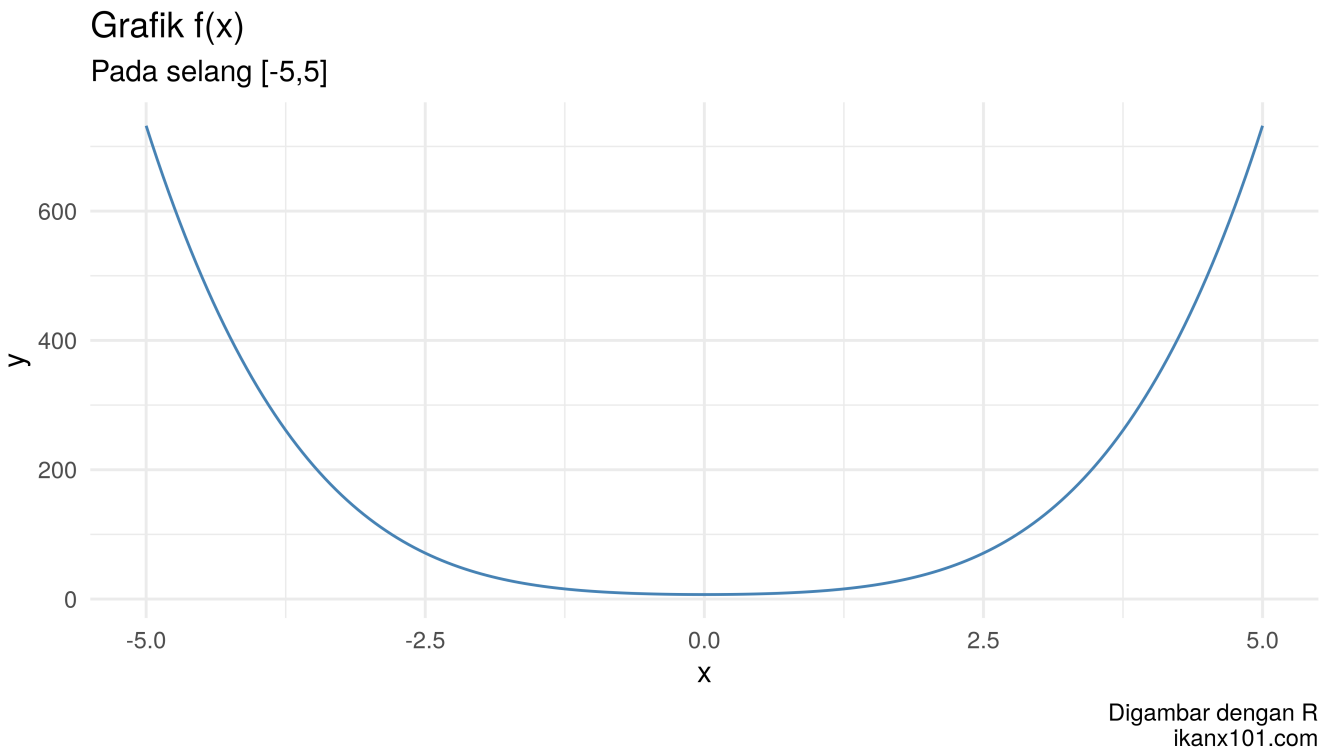


Figure 1: Gambar 15.1

Untuk menyelesaikan soal ini (menghitung nilai x dan $y = f(x)$ lalu menggambar dan mencari akar), saya akan gunakan program *Python* berikut ini:

program di mari

Berikut adalah gambar grafiknya:

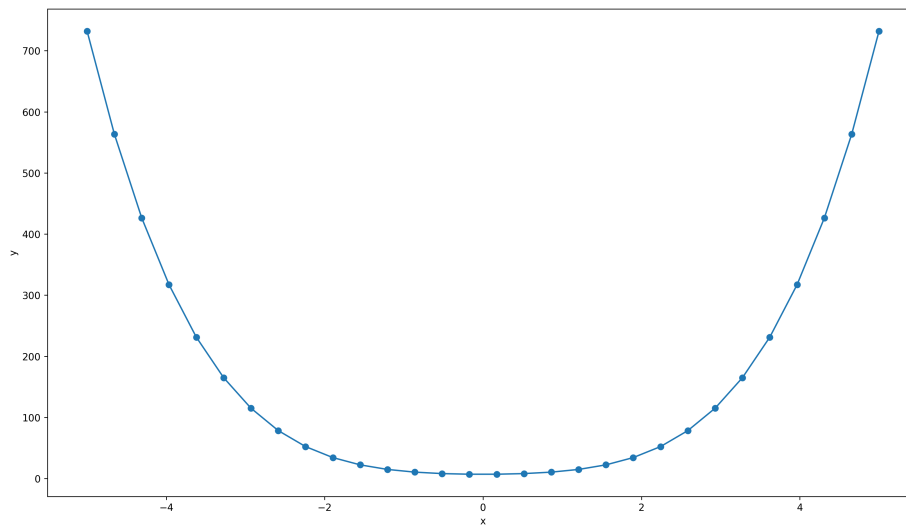


Figure 2: Gambar 15.1

TASK 2

Soal

15.2 Develop a Python program to evaluate the polynomial function $y = 3x^5 + 6$. Find an appropriate interval of x for which the function evaluation is done and plot the graph.

15.5 Develop a Python program to solve the polynomial function $y = 3x^5 + 6$.

Jawab

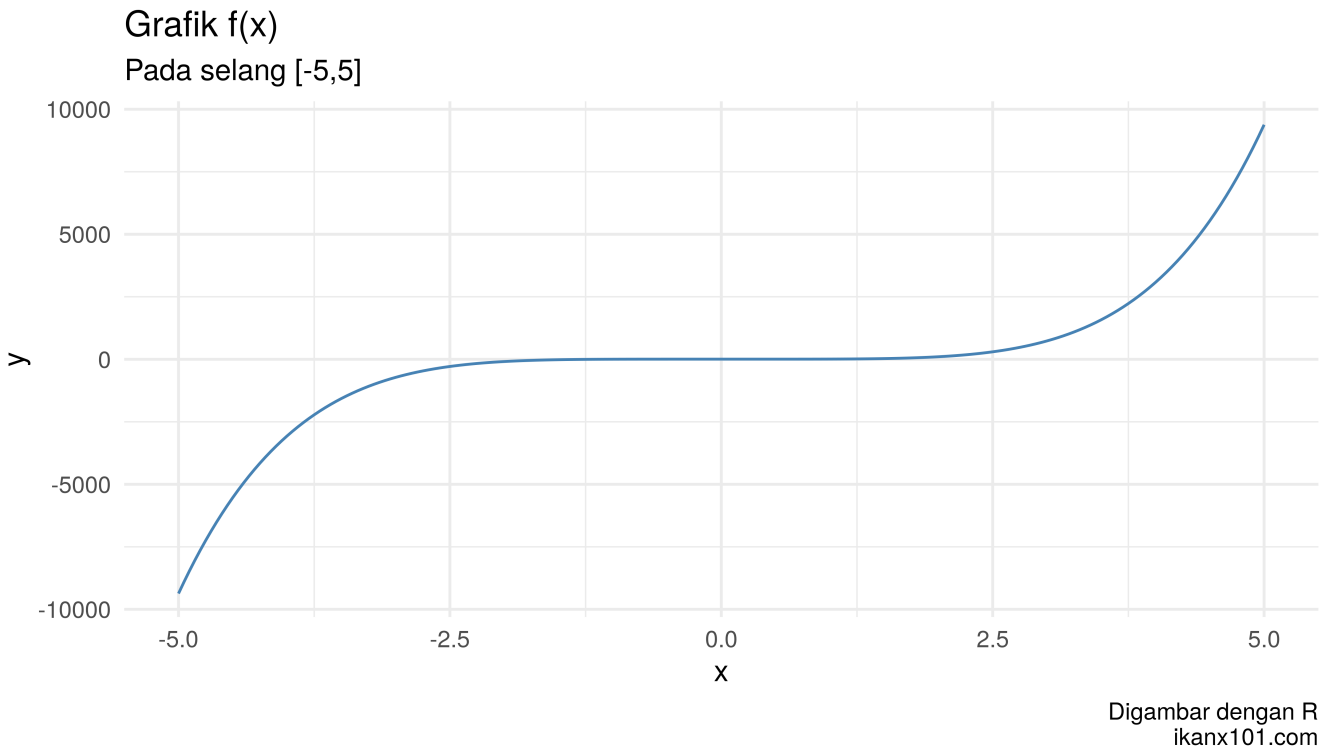


Figure 3: Gambar 15.2

TASK 3

Soal

15.3 Develop a Python program to evaluate the polynomial function $y = 2x^6 - 1.5x^5 + 5x^4 - 6.5x^3 + 6x^2 - 3x + 4.5$. Find an appropriate interval of x for which the function evaluation is done and plot the relevant data.

15.6 Develop a Python program to solve the polynomial function $y = 2x^6 - 1.5x^5 + 5x^4 - 6.5x^3 + 6x^2 - 3x + 4.5$.

Jawab

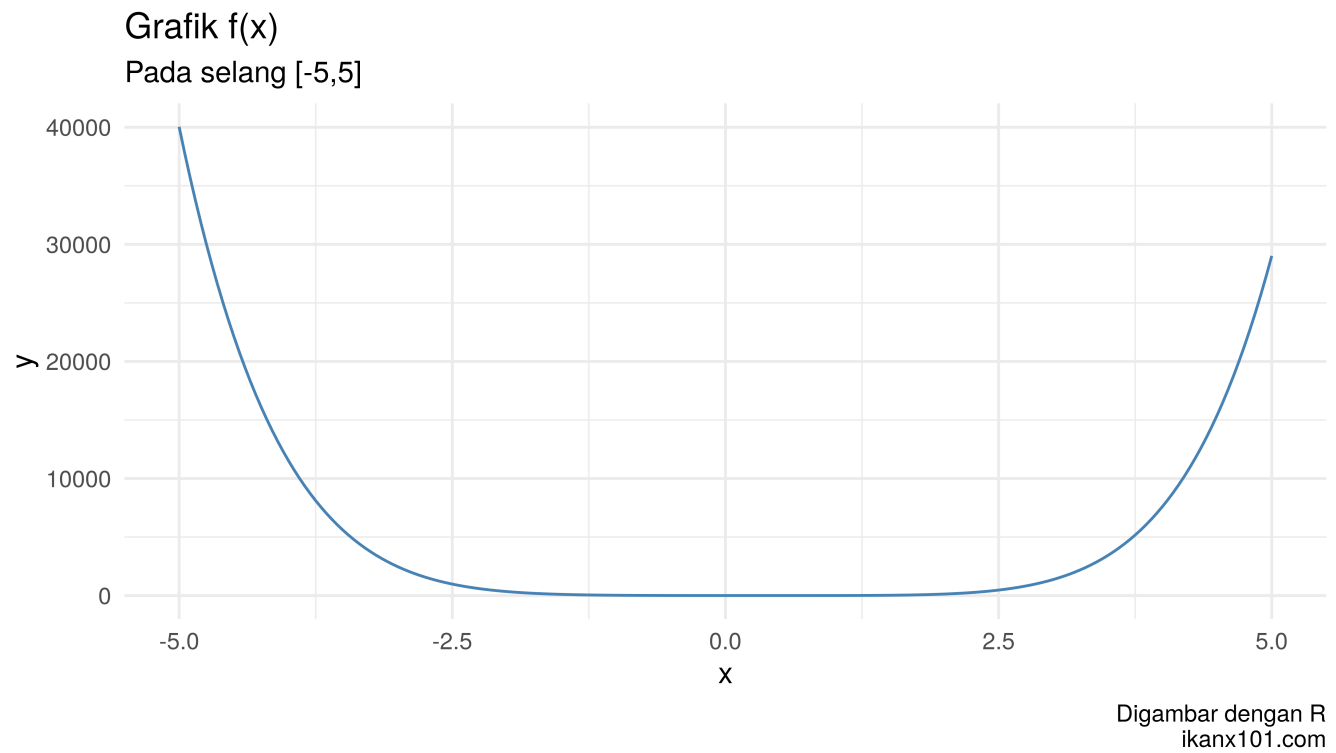


Figure 4: Gambar 15.3

== End ==