 Why did we move from punch cards to programming languages? What does that tell you about the purpose of programming languages?

Because lower-cost disk storage and affordable interactive terminals on cheap minicomputers make the use of computer languages much cheaper than punch cards, and more convenient and practical. From this, it can be concluded that the purpose of programming languages is to achieve complex purposes in a more convenient and quick way.

 There are hundreds of different programming languages out there. Why do you think we need so many?

Each programming language has its own characteristics suitable for specific tasks, and programmers use different programming languages to solve different problems. In order to solve problems that existing programming languages cannot solve, new languages are developed.

 What are some drawbacks of a programming language you use? How would you like it to be different? Think of specific examples.

Python is slow to run, and because it's compiled on every execution, any coding errors will manifest at runtime, resulting in a lot of testing required to program with Python. I hope it runs faster and the test program is simpler, and can tell me where the bug is faster rather than running to that place.

 If you were going to create a new programming language, how would you start? What do you need to define?

To start creating a new programming language, I need to design it first. Make some basic decisions about the paradigm to be used and the syntax of the language, like what programs the language is good at, what kind of people it is aimed at, whether it is imperative or functional, etc. Only then do we start creating the compiler and other actions.

Resources：

<https://softwareengineering.stackexchange.com/questions/262723/why-were-punch-cards-used-for-programming>

<https://www.freecodecamp.org/news/why-are-there-so-many-programming-languages/#:~:text=Conclusion,it%20suitable%20for%20specific%20tasks>.

<https://towardsdatascience.com/why-python-is-not-the-programming-language-of-the-future-30ddc5339b66>

<https://tomassetti.me/how-to-create-programming-language/>