### Program Documentation – Base Converter APK

**Program Name:** Base Converter  
**Version:** 0.1  
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**Release Date:** October 2025

**Purpose:**  
Base Converter allows users to convert numbers between Decimal (Base 10), Binary (Base 2), Octal (Base 8), and Hexadecimal (Base 16). It is designed for students, programmers, and anyone needing fast conversions on mobile devices.

**Description:**

* Built using Python with Kivy for the GUI.
* Clean, simple interface for entering numbers, selecting input and target bases, and viewing results.
* This APK represents the final packaged product, ready for Android installation.

**Features:**

* Converts numbers between decimal, binary, octal, and hexadecimal.
* Real-time conversion with validation for incorrect inputs.
* Mobile-friendly, lightweight, and offline.

**Usage Instructions:**

1. Install the APK on your Android device.
2. Open the Base Converter app.
3. Enter a number in the input field.
4. Tap button holding source and target base (i.e “DEC → BIN”).
5. Check the field labeled “Output Value” to see result.

**Dependencies (for development):**

* Python and Kivy (all bundled in the APK; end-users don’t need these).

**Limitations:**

* Maximum input size limited by device memory.
* Converts only to base 16.

**Future Improvements:**

* Additional number systems (Base 32, Base 64).
* Enhanced themes and mobile UI customization.