

Title: Request to reallocate some recently-approved Sharada characters
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Action: For consideration by UTC and WG2
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1 Introduction

This document requests the reallocation of five characters within the Sharada block that have been approved for inclusion in the Universal Character Set, but which are not yet formally encoded. The current code points of the characters and the requested reassignments are:

	Current	Requested
SHARADA CONTINUATION MARK	111CE	111DD
SHARADA HEADSTROKE	111DB	111DC
SHARADA SIGN SIDDHAM	111DC	111DB
SHARADA SECTION MARK-1	111DD	111DE
SHARADA SECTION MARK-2	111DE	111DF

Enclosed are two sets of code charts and names lists. The set titled ‘Sharada - Current’ shows characters already encoded and those approved for inclusion, but not yet encoded, which are highlighted in yellow. The ‘Sharada - Requested’ set shows the desired reallocations, with the new locations highlighted in blue.

2 Justification

The current allocations for the aforementioned five characters cause disorganization in the Sharada block because characters that should be grouped together on account of similar function are scattered. Moreover, there are additional characters that will be proposed for encoding in the block and these should be contiguous to characters already approved for inclusion if they are found to be suitable for encoding.

The onus for the ‘misallocations’ falls upon the author of the proposals to encode the five characters, who is also the author of the present request. In the proposal to encode SHARADA SIGN SIDDHAM, the author suggested that the character be encoded at U+111DB (N4331 L2/12-318). However, in the proposal for SHARADA HEADSTROKE, the author inadvertently suggested that this character should also be encoded at U+111DB instead of U+111DC (N4337 L2/12-324). The proposal for SHARADA CONTINUATION MARK did not request a specific allocation, but suggested that the character be encoded in the 111Cx column (N4329 L2/12-319). The proposal for SHARADA SECTION MARK-1 and SHARADA SECTION MARK-2 suggested that these characters be encoded at U+111DD and U+111DE (N4338 L2/12-325).

Swapping the positions of SHARADA SIGN SIDDHAM and SHARADA HEADSTROKE would place SHARADA SIGN SIDDHAM at U+111DB (as originally intended), next to SHARADA EKAM (pending encoding at U+111DA),

so that these two head marks may be grouped together. Shifting SHARADA SECTION MARK-1 and SHARADA SECTION MARK-2 each one code point down would open up a spot in the final column at U+111DD, so that SHARADA CONTINUATION MARK may be placed next to SHARADA HEADSTROKE, both of which are typographic marks. Shifting SHARADA CONTINUATION MARK from column 111Cx to 111Dx opens up two spaces after SHARADA SUTRA MARK (U+111CD), which may be used for two signs that should be grouped with SHARADA SUTRA MARK as characters used in a mathematical treatise called the *Bakhshali Manuscript*.

The reallocation of the five characters as specified above will not affect the encoding for Sharada in the UCS. Rather, it will enhance the organization of the Sharada block and lead to the logical usage of the remaining two spaces in the block. Moreover, the reallocation will assist in establishing a more organized names list for Sharada. The author understands the burdens placed upon UTC and WG2 by the request to assign new code points to characters that have been approved and that are at advanced stages of ISO balloting. Nonetheless, it is hoped that the two standards bodies will approve the request based upon the benefits to be accrued by the reallocations.

	1118	1119	111A	111B	111C	111D
0	ॐ 11180	ॐ 11190	ॐ 111A0	ॐ 111B0	ॐ 111C0	ॐ 111D0
1	ॐ 11181	ॐ 11191	ॐ 111A1	ॐ 111B1	ॐ 111C1	ॐ 111D1
2	ॐ 11182	ॐ 11192	ॐ 111A2	ॐ 111B2	ॐ 111C2	ॐ 111D2
3	ॐ 11183	ॐ 11193	ॐ 111A3	ॐ 111B3	ॐ 111C3	ॐ 111D3
4	ॐ 11184	ॐ 11194	ॐ 111A4	ॐ 111B4	ॐ 111C4	ॐ 111D4
5	ॐ 11185	ॐ 11195	ॐ 111A5	ॐ 111B5	ॐ 111C5	ॐ 111D5
6	ॐ 11186	ॐ 11196	ॐ 111A6	ॐ 111B6	ॐ 111C6	ॐ 111D6
7	ॐ 11187	ॐ 11197	ॐ 111A7	ॐ 111B7	ॐ 111C7	ॐ 111D7
8	ॐ 11188	ॐ 11198	ॐ 111A8	ॐ 111B8	ॐ 111C8	ॐ 111D8
9	ॐ 11189	ॐ 11199	ॐ 111A9	ॐ 111B9	ॐ 111C9	ॐ 111D9
A	ॐ 1118A	ॐ 1119A	ॐ 111AA	ॐ 111BA	ॐ 111CA	ॐ 111DA
B	ॐ 1118B	ॐ 1119B	ॐ 111AB	ॐ 111BB	ॐ 111CB	ॐ 111DB
C	ॐ 1118C	ॐ 1119C	ॐ 111AC	ॐ 111BC	ॐ 111CC	ॐ 111DC
D	ॐ 1118D	ॐ 1119D	ॐ 111AD	ॐ 111BD	ॐ 111CD	ॐ 111DD
E	ॐ 1118E	ॐ 1119E	ॐ 111AE	ॐ 111BE	ॐ 111CE	ॐ 111DE
F	ॐ 1118F	ॐ 1119F	ॐ 111AF	ॐ 111BF		

Various signs

11180	◌	SHARADA SIGN CANDRABINDU
11181	◌	SHARADA SIGN ANUSVARA
11182	◌	SHARADA SIGN VISARGA

Independent vowels

11183	𑆀	SHARADA LETTER A
11184	𑆁	SHARADA LETTER AA
11185	𑆂	SHARADA LETTER I
11186	𑆃	SHARADA LETTER II
11187	𑆄	SHARADA LETTER U
11188	𑆅	SHARADA LETTER UU
11189	𑆆	SHARADA LETTER VOCALIC R
1118A	𑆇	SHARADA LETTER VOCALIC RR
1118B	𑆈	SHARADA LETTER VOCALIC L
1118C	𑆉	SHARADA LETTER VOCALIC LL
1118D	𑆊	SHARADA LETTER E
1118E	𑆋	SHARADA LETTER AI
1118F	𑆌	SHARADA LETTER O
11190	𑆍	SHARADA LETTER AU

Consonants

11191	𑆎	SHARADA LETTER KA
11192	𑆏	SHARADA LETTER KHA
11193	𑆐	SHARADA LETTER GA
11194	𑆑	SHARADA LETTER GHA
11195	𑆒	SHARADA LETTER NGA
11196	𑆓	SHARADA LETTER CA
11197	𑆔	SHARADA LETTER CHA
11198	𑆕	SHARADA LETTER JA
11199	𑆖	SHARADA LETTER JHA
1119A	𑆗	SHARADA LETTER NYA
1119B	𑆘	SHARADA LETTER TTA
1119C	𑆙	SHARADA LETTER TTHA
1119D	𑆚	SHARADA LETTER DDA
1119E	𑆛	SHARADA LETTER DDHA
1119F	𑆜	SHARADA LETTER NNA
111A0	𑆝	SHARADA LETTER TA
111A1	𑆞	SHARADA LETTER THA
111A2	𑆟	SHARADA LETTER DA
111A3	𑆠	SHARADA LETTER DHA
111A4	𑆡	SHARADA LETTER NA
111A5	𑆢	SHARADA LETTER PA
111A6	𑆣	SHARADA LETTER PHA
111A7	𑆤	SHARADA LETTER BA
111A8	𑆥	SHARADA LETTER BHA
111A9	𑆦	SHARADA LETTER MA
111AA	𑆧	SHARADA LETTER YA
111AB	𑆨	SHARADA LETTER RA
111AC	𑆩	SHARADA LETTER LA
111AD	𑆪	SHARADA LETTER LLA
111AE	𑆫	SHARADA LETTER VA
111AF	𑆬	SHARADA LETTER SHA
111B0	𑆭	SHARADA LETTER SSA
111B1	𑆮	SHARADA LETTER SA
111B2	𑆯	SHARADA LETTER HA

Dependent vowel signs

111B3	◌	SHARADA VOWEL SIGN AA
111B4	◌	SHARADA VOWEL SIGN I
111B5	◌	SHARADA VOWEL SIGN II
111B6	◌	SHARADA VOWEL SIGN U
111B7	◌	SHARADA VOWEL SIGN UU
111B8	◌	SHARADA VOWEL SIGN VOCALIC R
111B9	◌	SHARADA VOWEL SIGN VOCALIC RR
111BA	◌	SHARADA VOWEL SIGN VOCALIC L
111BB	◌	SHARADA VOWEL SIGN VOCALIC LL

111BC	◌	SHARADA VOWEL SIGN E
111BD	◌	SHARADA VOWEL SIGN AI
111BE	◌	SHARADA VOWEL SIGN O
111BF	◌	SHARADA VOWEL SIGN AU

Virama

111C0	◌	SHARADA SIGN VIRAMA
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Various signs

111C1	𑆰	SHARADA SIGN AVAGRAHA
111C2	𑆱	SHARADA SIGN JIHVAMULIYA
111C3	𑆲	SHARADA SIGN UPADHMANIYA

Sign

111C4	𑆳	SHARADA OM
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Punctuation

111C5		SHARADA DANDA
111C6		SHARADA DOUBLE DANDA
111C7	•	SHARADA ABBREVIATION SIGN

Signs

111C8	,	SHARADA SEPARATOR
111C9	𑆴	SHARADA SANDHI MARK

Signs for Kashmiri

111CA	◌	SHARADA SIGN NUKTA
111CB	◌	SHARADA VOWEL MODIFIER MARK
111CC	◌	SHARADA EXTRA SHORT VOWEL MARK

Sign from the Bakhshali Manuscript

111CD	𑆵	SHARADA SUTRA MARK
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Continuation mark

111CE	𑆶	SHARADA CONTINUATION MARK
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Digits

111D0	•	SHARADA DIGIT ZERO
111D1	◌	SHARADA DIGIT ONE
111D2	𑆷	SHARADA DIGIT TWO
111D3	𑆸	SHARADA DIGIT THREE
111D4	𑆹	SHARADA DIGIT FOUR
111D5	𑆺	SHARADA DIGIT FIVE
111D6	𑆻	SHARADA DIGIT SIX
111D7	𑆼	SHARADA DIGIT SEVEN
111D8	𑆽	SHARADA DIGIT EIGHT
111D9	𑆾	SHARADA DIGIT NINE

Head mark

111DA	𑆿	SHARADA EKAM
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Sign

111DB	𑇀	SHARADA HEADSTROKE
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Head mark

111DC	𑇁	SHARADA SIGN SIDDHAM
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Section marks

111DD	𑇂	SHARADA SECTION MARK-1
111DE	𑇃	SHARADA SECTION MARK-2

	1118	1119	111A	111B	111C	111D
0	◌ि 11180	ꣳ 11190	उ 111A0	ध 111B0	ी 111C0	• 111D0
1	◌ं 11181	क 11191	घ 111A1	भ 111B1	ः 111C1	० 111D1
2	◌ः 11182	प 11192	र 111A2	ढ 111B2	ब 111C2	३ 111D2
3	म 11183	ग 11193	उ 111A3	ा 111B3	ष 111C3	उ 111D3
4	मु 11184	य 11194	न 111A4	ि 111B4	ठि 111C4	ॡ 111D4
5	ड 11185	ए 11195	प 111A5	ी 111B5	। 111C5	५ 111D5
6	ई 11186	म 11196	ढ 111A6	्र 111B6	॥ 111C6	७ 111D6
7	उ 11187	क 11197	व 111A7	्र 111B7	• 111C7	१ 111D7
8	ऊ 11188	ख 11198	र 111A8	ृ 111B8	। 111C8	उ 111D8
9	ऐ 11189	न 11199	भ 111A9	ृ 111B9	ॡ 111C9	७ 111D9
A	ऑ 1118A	र 1119A	घ 111AA	ृ 111BA	◌ 111CA	जाट 111DA
B	इ 1118B	ए 1119B	र 111AB	ृ 111BB	◌ 111CB	७ 111DB
C	इ 1118C	० 1119C	ल 111AC	◌ 111BC	◌ 111CC	— 111DC
D	प 1118D	र 1119D	र 111AD	◌ 111BD	◌ 111CD	२ 111DD
E	ने 1118E	र 1119E	व 111AE	◌ 111BE	◌ 111CE	२ 111DE
F	र 1118F	३ 1119F	म 111AF	◌ 111BF	◌ 111CF	३ 111DF

Various signs

11180	◌	SHARADA SIGN CANDRABINDU
11181	◌	SHARADA SIGN ANUSVARA
11182	◌:	SHARADA SIGN VISARGA

Independent vowels

11183	श	SHARADA LETTER A
11184	सु	SHARADA LETTER AA
11185	इ	SHARADA LETTER I
11186	ई	SHARADA LETTER II
11187	उ	SHARADA LETTER U
11188	ऊ	SHARADA LETTER UU
11189	ऋ	SHARADA LETTER VOCALIC R
1118A	ॠ	SHARADA LETTER VOCALIC RR
1118B	ऌ	SHARADA LETTER VOCALIC L
1118C	ॡ	SHARADA LETTER VOCALIC LL
1118D	ए	SHARADA LETTER E
1118E	ऐ	SHARADA LETTER AI
1118F	ॢ	SHARADA LETTER O
11190	ॣ	SHARADA LETTER AU

Consonants

11191	क	SHARADA LETTER KA
11192	ख	SHARADA LETTER KHA
11193	ग	SHARADA LETTER GA
11194	घ	SHARADA LETTER GHA
11195	ङ	SHARADA LETTER NGA
11196	च	SHARADA LETTER CA
11197	छ	SHARADA LETTER CHA
11198	ज	SHARADA LETTER JA
11199	झ	SHARADA LETTER JHA
1119A	ञ	SHARADA LETTER NYA
1119B	ट	SHARADA LETTER TTA
1119C	ठ	SHARADA LETTER TTHA
1119D	ड	SHARADA LETTER DDA
1119E	ढ	SHARADA LETTER DDHA
1119F	न्	SHARADA LETTER NNA
111A0	त	SHARADA LETTER TA
111A1	थ	SHARADA LETTER THA
111A2	द	SHARADA LETTER DA
111A3	ध	SHARADA LETTER DHA
111A4	न	SHARADA LETTER NA
111A5	प	SHARADA LETTER PA
111A6	फ	SHARADA LETTER PHA
111A7	ब	SHARADA LETTER BA
111A8	भ	SHARADA LETTER BHA
111A9	म	SHARADA LETTER MA
111AA	य	SHARADA LETTER YA
111AB	र	SHARADA LETTER RA
111AC	ल	SHARADA LETTER LA
111AD	ळ	SHARADA LETTER LLA
111AE	व	SHARADA LETTER VA
111AF	श	SHARADA LETTER SHA
111B0	ष	SHARADA LETTER SSA
111B1	ह	SHARADA LETTER SA
111B2	ऌ	SHARADA LETTER HA

Dependent vowel signs

111B3	♂	SHARADA VOWEL SIGN AA
111B4	ॠ	SHARADA VOWEL SIGN I
111B5	ॡ	SHARADA VOWEL SIGN II
111B6	ॢ	SHARADA VOWEL SIGN U
111B7	ॣ	SHARADA VOWEL SIGN UU
111B8	।	SHARADA VOWEL SIGN VOCALIC R
111B9	॥	SHARADA VOWEL SIGN VOCALIC RR
111BA	०	SHARADA VOWEL SIGN VOCALIC L
111BB	ॠ	SHARADA VOWEL SIGN VOCALIC LL

111BC	॥	SHARADA VOWEL SIGN E
111BD	॥	SHARADA VOWEL SIGN AI
111BE	॥	SHARADA VOWEL SIGN O
111BF	॥	SHARADA VOWEL SIGN AU

Virama

111C0 ॐ SHARADA SIGN VIRAMA

Various signs

111C1		SHARADA SIGN AVAGRAHA
111C2		SHARADA SIGN JIHVAMULIYA
111C3		SHARADA SIGN UPADHMANIYA

Sign

111C4 ਭਿ SHARADA OM

Punctuation

111C5	I	SHARADA DANDA
111C6	II	SHARADA DOUBLE DANDA
111C7	•	SHARADA ABBREVIATION SIGN

Signs

111C8	, SHARADA SEPARATOR
111C9	, SHARADA SANDHI MARK

Signs for Kashmiri

111CA	○	SHARADA SIGN NUKTA
111CB	○	SHARADA VOWEL MODIFIER MARK
111CC	○	SHARADA EXTRA SHORT VOWEL MARK

Sign from the Bakhshali Manuscript

111CD ✪ SHARADA SUTRA MARK

Digits

111D0	•	SHARADA DIGIT ZERO
111D1	◦	SHARADA DIGIT ONE
111D2	३	SHARADA DIGIT TWO
111D3	३	SHARADA DIGIT THREE
111D4	५	SHARADA DIGIT FOUR
111D5	५	SHARADA DIGIT FIVE
111D6	८	SHARADA DIGIT SIX
111D7	१	SHARADA DIGIT SEVEN
111D8	३	SHARADA DIGIT EIGHT
111D9	७	SHARADA DIGIT NINE

Head marks

111DA ञा SHARADA EKAM
111DB ७ SHARADA SIGN SIDDHAM

Signs

111DC	𑖇	SHARADA HEADSTROKE
111DD	𑖆	SHARADA CONTINUATION MARK

Section marks

111DE	≈	SHARADA SECTION MARK-1
111DF	⤴	SHARADA SECTION MARK-2