

VARNA : Breath enabled assistive communication device

CODE BOOKLET

Varna allows the user to set various controls about speech synthesis

And supports the following:

Fundamental pattern: The user need to input a one or two bit pattern every time the user wants to do something related to the device. These patterns function in the following way:

Remember the codes are given as from the most significant to least significant digits, but while giving input start from the least significant one **everywhere**.

For eg , for setting controls , input 21 i.e. short exhale and then long exhale

001	1	Takes the user to the inbuilt sentences (61)
002	2	Allows the user to generate a number
011	3	Takes the user to word database (61)
012	4	Sets controls
021	5	Generates sound tones
022	6	Generates words using alphabets
022	7	Stops current synthesis
111	8	Pauses current synthesis
112	9	Resumes last synthesis
122	10	Prints the current status of the device in hexadecimal

1. **Long sentence database:** Start the bit pattern from the least significant bit, for eg : for “Have a nice day”
Give a long exhale and two consecutive short exhales

00001 1	I need water	00002 2	I need food
00011 3	Shut up	00012 4	Let's have a meeting then
00021 5	Hello dear! How are you?	00022 6	I beg your pardon.
00111 7	I am absolutely fine.	00112 8	Have a nice day. .
00121 9	I don't think so.	00122 10	I knew it.
00211 11	Where do you work?	00212 12	It is nearly impossible.
00221 13	See you soon again.	00222 14	Silence please.
01111 15	What do you want?	01112 16	What did you say?
01121 17	What a terrible day!	01122 18	Hey! What is going on.
01211 19	You are welcome.	01212 20	Absolutely not.
01221 21	Are you sure?	01222 22	As soon as possible.
02111 23	How much?	02112 24	Oh, pretty big.
02121 25	What about you?	02122 26	Thanks to the builders.
02211 27	How are your family members?	02212 28	It is fine completely. .
02221 29	I want to go out.	02222 30	I want to meet that person.
11111 31	May I know your name?	11112 32	Can I have your number.
11121 33	It is absolutely incredible	11122 34	Congratulations dear. .
11211 35	May God bless you!	11212 36	Of course. .
11221 37	I trust you.	11222 38	Never mind. .
12111 39	Do you understand.	12112 40	Thank you so much.
12121 41	For God's sake.	12122 42	May you live long!
12211 43	What are you doing.	12212 44	What have you got?
12221 45	Can someone give me fruits?	12222 46	Show me.
21111 47	Work hard, you will succeed	21112 48	I see that person often
21121 49	Please have a dining with us.	21122 50	You are looking awesome.
21211 51	Pretty descent.	21212 52	Wait for a second.

21221 53	I just don't care.	21222 54	Are you kidding?
22111 55	Having difficulty in breathing	22112 56	It is feeling hot
22121 57	Really smart.	22122 58	I heard somebody speaking
22211 59	Mind your own business.	22212 60	I don't know.
22221 61	It is so harsh and cold.	22222 61	Please help me.

2. Buitin Word database:

00001 1	Yes	00002 2	No
00011 3	lol	00012 4	Sad
00021 5	Lonely	00022 6	Proud of it
00111 7	anxious	00112 8	Excellent
00121 9	Aggrieved	00122 10	Bored
00211 11	Love you	00212 12	Sick
00221 13	Damn shit	00222 14	sweet
01111 15	Beautiful	01112 16	An apple.....away
01121 17	mango	01122 18	My favourite
01211 19	Happy Birthday	01212 20	Happy anniversary
01221 21	Miss you	01222 22	Don't worry.
02111 23	My God	02112 24	Restless
02121 25	Delicious	02122 26	Good Morning
02211 27	Good night	02212 28	ridiculous
02221 29	Dreamy	02222 30	Food ready?
11111 31	Handle with care	11112 32	Clothes
11121 33	Lights off.	11122 34	Uneasiness
11211 35	Lucky	11212 36	Forgive me
11221 37	Arrogant	11222 38	Milk
12111 39	Medicines	12112 40	For you
12121 41	How can it be?	12122 42	Fond of it
12211 43	Crying out loud	12212 44	What's wrong
12221 45	So sad	12222 46	Leave
21111 47	Be quick	21112 48	What

00011 3	i	00012 4	a
00021 5	n	00022 6	m
00111 7	s	00112 8	u.
00121 9	r	00122 10	w
00211 11	d	00212 12	k
00221 13	g	00222 14	o
01111 15	h	01112 16	v
01121 17	f	01122 18	?
01211 19	l	01212 20	!
01221 21	p	01222 22	j
02111 23	b	02112 24	x
02121 25	c	02122 26	y
02211 27	z	02212 28	q
02221 29	e	02222 30	t

For eg: For typing “Sun” type 111 211 12 2

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