

Transducer		INPUT	EXPECTED OUTPUT
<b>step1</b>	1	ABCDEFGHIJKLMNOPQRSTUVWXYZ	ABCDEFGHIJKLMNOPQRSTUVWXYZ
	2	AABBCCDDEEFFGGHHIIJJKLLMMNNOOPPQQRRSSTTUUVVWWXXYYZZ	ABCCDEFGHIJKLMNOPQRSTUVWXYZ
	3	A	A
	4	AAZZ	AZ
	5	AZZ	AZ
	6	ZZ	Z
	7	Z	Z
	8	ACCORDING	ACCORDING
	9	RUSSIAN	RUSIAN
	10	MIDDLE	MIDLE
	11	STEEL	STEL
	12	DOG	DOG
	13	SNIFF	SNIF
	14	SMALL	SMAL
	15	COMMERCIAL	COMERCIAL
	16	TROOPS	TROPS
	17	SUPPORT	SUPORT
	18	ATTACK	ATAK
	19	CCA	CCA
	20	ACC	ACC
<b>step2</b>	1	ABCDEFGHIJKLMNOPQRSTUVWXYZ	ABCDEFGHIJKLMNOPQRSTUVWXYZ
	2	WRAPPERS	RAPPERS
	3	KNEW	NEW
	4	GNAWER	NAWER
	5	PNEUMATIC	NEUMATIC
	6	AERIAL	ERIAL
	7	BREADCRUMB	BREADCRUM
	8	WWRAPPERS	WWRAPPERS
	9	KKNEW	KKNEW
	10	GGNAWER	GGNAWER
	11	PPNEUMATIC	PPNEUMATIC
	12	AAERIAL	AAERIAL
	13	BREADCRUMBB	BREADCRUMBB
	14	WRAPPERSWR	RAPPERSWR
	15	KNEWKN	NEWKN
	16	NGAWER	NGAWER
	17	NPEUMATIC	NPEUMATIC
	18	AERIALAE	ERIALAE
	19	BREADCRUMBA	BREADCRUMBA
	20	K	K
<b>step3</b>	1	ABCDEFGHIJKLMNOPQRSTUVWXYZ	ABKDEFGHIJKLMNOPQRSTUVWXYZ
	2	PRONUNCIATION	PRONUNXIATION
	3	SCHOOL	SKHOO
	4	PUTSCH	PUTSKH
	5	VICIOUS	VISIOUS
	6	CULTURE	KULTURE
	7	CROSSCHECK	KROSSKHEKK
	8	CIABATTA	XIABATTA
	9	MALACIA	MALAXIA
	10	ANNUNCIATE	ANNUNXIATE
	11	CHAFF	XHAFF
	12	ANARCH	ANARXH
	13	CYBERNETICIAN	SYBERNETIXIAN
	14	ABDUCE	ABDUSE
	15	ABUNDANCY	ABUNDANSY
	16	CYAN	SYAN
	17	CICYAN	SISYAN
	18	CICYANCE	SISYANSE
	19	CICYACNCE	SISYAKNSE
	20	C	K
<b>step4</b>	1	ABCDEFGHIJKLMNOPQRSTUVWXYZ	ABCTEFGHIJKLMNOPQRSTUVWXYZ

	2	PLEDGES	PLEJGES
	3	FUDGY	FUJGY
	4	WEDGY	WEJGY
	5	WEDGYFUDGY	WEJGYFUJGY
	6	BADGING	BAJGING
	7	DODGING	TOJGING
	8	DGIN	JGIN
	9	DDGIN	TJGIN
	10	ABDUCED	ABTUCET
	11	DAMAGED	TAMAGET
	12	BRIDGE	BRIJGE
	13	PLEDDGES	PLETJGES
	14	FUDGY	FUJGY
	15	ADD	ATT
	16	AID	AIT
	17	DAD	TAT
	18	DDADD	TTATT
	19	DD	TT
	20	D	T
<b>step5</b>	1	ABCDEFGHJKLMNOPQRSTUVWXYZ	ABCDEFGHJKLMNOPQRSTUVWXYZ
	2	FIGHT	FIHT
	3	FOREIGN	FOREIN
	4	FOREIGNA	FOREIGNA
	5	SIGNED	SINED
	6	SIGNEDA	SIGNEDA
	7	FIGH	FIGH
	8	DGIN	DGIN
	9	GHETTO	HETTO
	10	HIGHLIGHT	HIHLIHT
	11	HIGHLIGH	HIHLIGH
	12	HGHGHHGHGHH	HHHHHHGH
	13	HGHHGHHGHGHHGH	HHHHHHHHHHGH
	14	HGGHG	HGHG
	15	ALTHOUGH	ALTHOUGH
	16	AIRTIGHT	AIRTIHT
	17	GNOMOLOGY	GNOMOLOGY
	18	GGHGG	GHGG
	19	GG	GG
	20	G	G
<b>step6</b>	1	ABCDEFGHJKLMNOPQRSTUVWXYZ	ABCDEFGHJKLMNOPQRSTUVWXYZ
	2	BACKPACK	BAKPAK
	3	LUCK	LUK
	4	FIHT	FIT
	5	GRAHAM	GRAHAM
	6	QUITE	KUITE
	7	SHOULD	XHOULD
	8	COMISIONER	COMIXIONER
	9	AMORPH	AMORF
	10	ENCEPHALOGRAPH	ENCEFALOGRAF
	11	PHILOSOPHIZER	FILOSOFIZER
	12	SUQ	SUK
	13	QABALIST	KABALIST
	14	SESQUISQUARE	SESKUISKUARE
	15	AIRBRUSH	AIRBRUXH
	16	MAHARAJAH	MAHARAJA
	17	SIAMESIAA	XIAMEXIAA
	18	AGNOSIA	AGNOXIA
	19	GAUSSIAN	GAUSXIAN
	20	SEAHAWK	SEAHAWK
<b>step7</b>	1	ABCDEFGHJKLMNOPQRSTUVWXYZ	ABCDEFGHJKLMNOPQRSTUVWXYZ
	2	SUBSTANTIAL	SUBSTANXIAL
	3	THE	OE

4	MATCH	MACH
5	HAVE	HAFE
6	VACANT	FACANT
7	MAGLEV	MAGLEF
8	OVERVIVIDLY	OFERFIFIDLY
9	WHAT	WAT
10	WWHAT	WWHAT
11	TIARA	XIARA
12	PATIO	PAXIO
13	PATIIO	PATIIO
14	PATIOO	PAXIOO
15	OPHTHALMOPATHY	OPH0ALMOPA0Y
16	ATCHHIN	ACHHIN
17	ATCHIN	ACHIN
18	TH	0
19	T	T
20	V	F

## step8

1	ABCDEFGHGIJKLMNOPQRSTUVWXYZ	ABCDEFGHGIJKLMNOPQRSTUVKSS
2	XENON	SENON
3	SEX	SEKS
4	LAWN	LAN
5	BY	B
6	KEYBOARD	KEBOARD
7	SIZE	SISE
8	BUZZ	BUSS
9	AZOBENZIL	ASOBENSIL
10	AKARYOCYTE	AKARYOCTE
11	SEXWY	SEKS
12	XEROX	SEROKS
13	DOXXED	DOKSKSED
14	EXOTOXIN	EKSOTOKSIN
15	AYYWY	A
16	ZWWY	S
17	WWYBYYWA	BWA
18	WWYAYYWB	YAB
19	WZZ	SS
20	Z	S

## step9

1	ABCDEFGHGIJKLMNOPQRSTUVWXYZ	ABCDFGHJJKLMNPQRSTUVWXYZ
2	USE	US
3	SEX	SX
4	LAWN	LWN
5	OXYMETHYLENE	OXYMTHYLN
6	KEYBOARD	KYBRD
7	SIZE	SZ
8	BUZZ	BZZ
9	AZOBENZIL	AZBNZL
10	AAKARYOCYTE	AKRYCYT
11	ABONNEMENT	ABNNMNT
12	EARTHQUAKE	ERTHQK
13	IATROPHYSICALLY	ITRPHYSCLLY
14	ICESKATING	ICSKTNG
15	OBJECTIONABILITY	OBJCTNBLTY
16	UBIQUITOUSNESS	UBQTSNSS
17	IIKUOETC	IKTC
18	UUAEEEIIOUU	U
19	AEIOU	A
20	A	A

## metaphoneLN

1	ABCDEFGHGIJKLMNOPQRSTUVWXYZ	ABKTFHJKLMNPKRSTFKSS
2	EXOTOXIN	EKSTKSN
3	OXYMETHYLENE	OKSM0LN
4	AZOBENZIL	ASBNSL
5	OVERVIVIDLY	OFRRFTL

6	OPHTHALMOPATHY	OF0LMP0
7	AIRBRUSH	ARBRKSH
8	COMISIONER	KMKSNR
9	ENCEPHALOGRAPH	ENSFLGRF
10	HIGHLIGH	HLGH
11	WEDGYFUDGY	WJGFJG
12	SHAKSPEAR	SHKSPR
13	UBIQUITOUSNESS	UBKTSNS
14	EXOTOXIN	EKSTKSN
15	ANATOMISATIONS	ANTMSKSNS
16	PSEUDOPSEUDOHYPOPARATHYROIDISM	PSTPSTPPR0RTSM
17	TRINITROPHENYLMETHYLNITRAMINES	TRNTRFNLMO LNTRMNS
18	HIPPOTOMONSTROSESQUIPEDALIOPHOBES	HPPTMNSTRSSKPTLFBS
19	AGRICULTURALISTICALLY	AGRKLTRLSTKL
20	ACETYLAMINOFLUORENES	ASTLMNFLRNS