

Outputs

Enter input

hi i am varsha from nalgonda telangana 508001

Transmitted Text:

HI I AM VARSHA FROM NALGONDA TELANGANA 508001

Encoded Input :

..... ..
..... ..

Digital Signal :

```
[1 0 1 0 1 0 1 0 0 0 1 0 1 0 0 0 0 0 0 0 1 0 1 0 0 0 0 0 0 0 1 0 1 1 1
0 0 0 1 1 1 1 0 1 1 1 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 1 1 1 0 0 0 1 0 1 1 1 0
0 0 1 0 1 1 1 0 1 0 0 0 1 0 1 0 1 0 0 0 1 0 1 0 1 0 1 0 0 0 1 0 1 1 1
0 0 0 0 0 0 0 1 0 1 0 1 1 1 0 1 0 0 0 1 0 1 1 1 0 1 0 0 0 1 1 1 0 1 1
1 0 1 1 1 0 0 0 1 1 1 0 1 1 1 0 0 0 0 0 0 0 1 1 1 0 1 0 0 0 1 0 1 1 1
0 0 0 1 0 1 1 1 0 1 0 1 0 0 0 1 1 1 0 1 1 1 0 1 0 0 0 1 1 1 0 1 1 1 0
1 1 1 0 0 0 1 1 1 0 1 0 0 0 1 1 1 0 1 0 1 0 0 0 1 0 1 1 1 0 0 0 0 0 0
0 1 1 1 0 0 0 1 0 0 0 1 0 1 1 1 0 1 0 1 0 0 0 1 0 1 1 1 0 0 0 1 1 1 0
1 0 0 0 1 1 1 0 1 1 1 0 1 0 0 0 1 0 1 1 1 0 0 0 1 1 1 0 1 0 0 0 1 0 1
1 1 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 0 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1
1 0 1 1 1 0 0 0 1 1 1 0 1 1 1 0 1 1 1 0 1 0 1 0 0 0 1 1 1 0 1 1 1 0 1
1 1 0 1 1 1 0 1 1 1 0 0 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1 0 0 0
1 0 1 1 1 0 1 1 1 0 1 1 1 0 1 1 1]
```

Modulated signal :

[1 -1 1 -1 1 -1 1 -1 -1 -1 1 -1 1 -1 -1 -1 -1 -1 -1 1 -1 1 -1 -1 -1 -1
-1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 -1 1 -1 1
-1 1 -1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 1 -1 -1 -1 1 -1
1 -1 1 -1 -1 -1 1 -1 1 -1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 -1

1 -1 1 -1 1 1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1
1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1
-1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 1 -1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 1 -1
-1 -1 1 1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1 1 1 -1 1 -1
1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 -1 1 1 1 -1 -1 -1 1 -1 -1 -1 1 -1
1 1 1 -1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1 1 1
-1 1 1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1 -1 1 1
1 -1 -1 -1 -1 -1 -1 -1 1 -1 1 -1 1 -1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 1
1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 1 -1 1 -1 -1
-1 1 1 1 -1 1 1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1
1 1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 1 1 1 -1 1 1 1]

corrupted signal:

[1.04493871115715 -0.774170757247224 0.29239671430186
-0.673414454977609 0.891406561819926 -0.86319874252155
0.826738795499211 -1.11812869833001 -0.949556608254167
-1.45967954403108 1.01921902551239 -1.33772642356995
1.34175478314611 -1.00320260149183 -0.512836307260209
-1.10543085338475 -1.13540362553056 -1.39585431003074
-0.979604162135635 -1.65818542529203 0.735560426047945
-1.06671762309201 1.36576023144741 -1.04239684200016
-1.15238269317166 -1.03001526302844 -1.16693037720123
-0.637945714291731 -1.55732165420368 -0.732591765842719
1.24898015026522 -1.33679538844898 0.902380119258891
0.499315271705053 1.44464198217917 -0.54763051554897
-0.651818885467289 -0.724479420056713 0.845122920206617
1.062374069376 0.960896276518487 -0.899260539793621
0.862430245145313 1.10695031294143 0.914949020452762
-0.899538361645583 -0.499719018371183 -0.605660323847983
-1.25239793105036 -0.920886800572862 -1.53482593304396
-1.27786865117766 0.687020137284149 -1.25322389708314

0.57304615226382 -0.738773771847963 1.57622428728237
-0.782323453978286 0.953505713300246 0.716853121279065
1.08869125612123 -1.24191938254679 -0.885546660826606
-1.12417439406056 1.13679291918873 -0.639627127657983
1.11505496628724 0.348625460516576 1.3298812507876
-0.861894935380752 -1.02342982979486 -0.746851673811398
0.353046567249248 -0.904136866455424 0.853297956849228
0.740915632553685 1.12795874813147 -0.959812581182356
0.750548903986807 -1.05645573555427 -0.920733950110609
-0.557900527371306 0.871779821883963 -0.434894553788899
1.16419090195598 -1.08766924627813 0.786285549009261
-1.1665137657707 -0.72798414048718 -1.2315310924114
1.17299422268471 -1.14394656672902 1.1190787892019
-1.29711852908417 0.933386501072853 -1.45082769756459
0.977663238069668 -1.13919086179042 -1.08899946333151
-1.16680642204194 0.673909766363221 -1.06548387808309
1.09448355208414 0.922632394896209 1.63305909284963
-0.993318943144606 -0.939276371742062 -0.489303378231976
-0.446590263985874 -1.37391606465498 -0.667411380341186
-0.921848314965301 0.301103396211551 -1.1670700911562
1.74410706490259 -0.967080986807985 0.345778247647147
0.992993295425573 0.648756783246316 -1.35098250775269
0.649602235245647 -0.883103717851577 -0.84670940709103
-0.929882400058174 0.901152107531079 -0.991679256910838
1.61342465529681 0.813761103135144 0.871462159163174
-0.999950063499446 0.723606232150612 -0.938087294471701
-0.777235007465005 -0.984701032284912 0.914788932884602
0.984716851147844 0.899677295491557 -1.45124380875204
0.840625969452149 0.93529574468015 0.653718050577734
-0.925897929393262 0.933297756486984 1.34062868977847

0.935591224657381 -0.758408474517428 -0.80195433790813
-1.05015511921973 1.82594780496604 1.09898365680212
0.944369639095288 -1.18741324372826 0.951010074961359
1.47606390730904 0.973279773527621 -0.848503619382217
-0.943700352746748 -1.00502466964724 -1.07968553689994
-0.650070222246858 -1.00474127665909 -0.465575986694582
0.567860404794677 1.09263333165428 1.25797471914311
-1.28734737313941 1.27676072691183 -0.843168166862204
-1.09466876563647 -0.725862036664634 1.25110360250813
-1.6261637014765 1.29511962359188 1.30619455019058
1.15350354853576 -0.877877160200212 -1.19820301203124
-1.37734502078799 1.12098645096266 -1.14301874733315
1.06636200411437 0.959633940133554 0.637825923879754
-1.14799517489819 1.38235900765932 -0.877363360341737
1.20339494612934 -0.721652780477167 -0.92297579251815
-1.55652769574448 0.570925024789412 0.779452590566307
1.40604866239106 -1.0415755131053 1.02867345659956
0.926007503842852 0.846795351173192 -1.03608262169846
0.346274702072559 -1.11379349919997 -1.10950155906596
-0.954092188524501 1.11092148774941 1.25965076925273
1.04250585080031 -0.513531414416556 0.714270886296665
0.782584523852827 1.3140502323813 -0.698317438752445
0.875610681466189 1.13170762466577 1.02250707183187
-0.763221134751638 -0.85650920915318 -1.15947047113711
0.956152272230706 1.01973838214493 0.914662034036792
-0.863997099951892 1.4511313745177 -1.12756447270498
-1.00553820675202 -0.997169379248994 0.42228517305214
1.01697586873706 0.820879130970402 -1.20818187006956
0.548861592474881 -1.57431508733216 0.794604066793432
-1.17346729742347 -1.06057072393412 -0.843854593326176

1.39186237314146 -1.26413598650381 1.23014736626996
0.973741606467083 1.45148049301323 -1.10444814311288
-0.955672339891637 -1.04021627809042 -1.2118651494889
-0.937675783253812 -1.5465228792483 -1.01970772221012
0.864650585011202 1.40015343033336 1.72358287981966
-1.12225993999758 -0.890668949836743 -1.01841077161713
0.909998575381125 -0.409409325842382 -1.3272288311296
-0.788690749870685 1.24965618957025 -0.525558481682938
0.737632279810519 0.93302513483399 1.12578049312211
-1.33239794409202 0.895009041081888 -1.13997372069275
1.20766275043107 -0.938965654762994 -0.806031259417327
-1.22464013674318 0.739645025095333 -1.43324678711008
1.15369386363771 0.941850966286261 0.937491075161373
-1.36097905609959 -1.38578337312429 -0.178340297523412
1.25704450049801 0.741224547904991 0.439020720569649
-0.917835220590731 1.05802432195265 -0.706920157179921
-1.16778046700561 -0.904104141730513 0.500458801862107
0.662931665700578 0.80534042178616 -0.772801560353959
0.290345726235427 1.48879665754163 0.936978191068608
-1.04370345325782 1.6314088766642 -0.87988570170191
-0.818040419431849 -1.01974654150901 0.866162883235831
-1.04496762895221 1.33631994691638 0.6434840399348
1.06971700863403 -0.630621926617384 -1.16258684114182
-1.30144349691195 0.355348436825336 1.01126160569263
0.866954743462193 -1.23975516896608 1.22672287570053
-0.969106842780416 -1.37316170878576 -1.25786697135705
0.401890190619134 -1.16399049163325 1.05950896033506
1.05963204305656 1.1037478021883 -1.38910715628675
-1.04176940624453 -0.907242846050201 -0.564654081375356
-1.29965620642968 -1.09314878660718 -1.23852469493893

0.550470227200415 -1.33828024584608 0.969243870778756
-0.571313808938184 1.30722197770333 -0.743186680785735
0.896174614450897 -1.40112754415257 1.40939613434857
-0.764324151623611 -1.09416964916048 -1.10121714337353
1.00099654378373 0.60814044172405 1.09636254172555
-0.872949353057416 1.30366395690503 0.975342915355205
1.22061470236867 -1.41112060572851 0.677926054747102
1.03234669341575 0.937309923462284 -0.934567404133676
0.884106333124848 1.05249470717592 0.951915545326175
-0.942486521167309 0.926824502849673 0.79863877299259
1.24905650054124 -1.5718755930048 -1.31970761718769
-1.5039124423274 0.63748317256249 0.574269441532167
0.450150264980075 -0.634188847807215 1.26970261341649
0.657662097731001 0.479005203741341 -0.827193793106456
1.14895961589841 0.66912837745952 0.8413760448401
-0.859037986850554 1.13544541740008 -0.727365946355988
0.472067351954799 -1.06739527361527 -1.09870617054269
-0.944829851476133 0.623013608821801 0.703277685074105
1.50880383261416 -1.04825969197972 0.834949580571451
1.08280689299835 1.2836742248718 -0.902282476223598
0.796969760683136 0.681071120556373 0.958107473107892
-0.814877755762185 1.17214839286625 1.13655529782845
1.09028675876305 -1.31511728328709 0.692093595582728
0.66576102029624 0.909893636206452 -0.886952099693711
-0.998785300446723 -0.986719377432754 1.70087031219748
0.335585603601857 0.920507353287892 -0.598642096234136
1.3530553352262 0.659773975545603 1.241710286195
-1.52765596546033 0.72262883212199 1.29089652408262
0.955395789551162 -1.19236443670012 0.430413133284697
0.509055016208905 1.00941975211369 -1.18045342886752

1.38371307144029 1.29988601024856 1.55694576949435
-0.616312592369478 -0.750821200624405 -0.997768044896649
1.09332338247063 -0.584837815361461 0.642642489086985
0.97939087304414 1.12191673356844 -1.2303376307811
1.04642192937291 0.895699566131625 0.964082887287452
-0.51737074550594 0.981137138973496 0.415402677627331
1.04866466231933 -1.07538726883912 1.23321257184744
0.693223570429818 0.959479302858062]

Demodulated Signal

[1 -1 1 -1 1 -1 1 -1 -1 -1 1 -1 1 -1 -1 -1 -1 -1 1 -1 1 -1 -1 -1 -1
-1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 1 -1 1
-1 1 -1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 1 -1 -1 -1 1 -1
1 -1 1 -1 -1 -1 1 -1 1 -1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 -1
1 -1 1 -1 1 1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 1 -1 -1 1 1 1 -1 1 1 1 -1
1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1
-1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 1 -1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 1 -1
-1 -1 1 1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1 1 1 -1 1 -1
1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 -1 -1 -1 -1 1 1 1 -1 -1 -1 1 -1 -1 1 -1
1 1 1 -1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1 1
-1 1 1 1 -1 1 -1 -1 -1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 -1 -1 -1 1 -1 1
1 -1 -1 -1 -1 -1 -1 -1 1 -1 1 -1 1 -1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 1
1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1 1 -1 1 -1 -1
-1 1 1 1 -1 1 1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 1 1 -1 1 1 1 -1
1 1 1 -1 1 1 1 -1 1 1 1 -1 -1 -1 1 -1 1 1 1 -1 1 1 1 -1 1 1 1]

Recieved Digital signal

1010101000101000000010100000001011100011101110000000
1010101110001011100010111010001010100010101010001011
1000000010101110100010111010001110111011100011101110
0000001110100010111000101110101000111011101000111011
1011100011101000111010100010111000000011100010001011

1010100010111000111010001110111010001011100011101000
1011100000001010101010001110111011101110111000111011
1011101010001110111011101110111000111011101110111011
100010111011101110111

Recieved text :

HI I AM VARSHA FROM NALGONDA TELANGANA 508001

Final msg:

Great! we recived the exact msg

PLOTS-





