

```
> v := [2, 3, 5, 7, 13, 17, 19, 31, 61, 89, 107, 127, 521, 607, 1279]
      v := [2, 3, 5, 7, 13, 17, 19, 31, 61, 89, 107, 127, 521, 607, 1279]
```

(1)

```
> # the first few mersenne prime indexes.
```

```
> v2 := Vector[row](15) :
```

```
  for a from 1 to 15 do
```

```
    v2[a] := 2v[a] - 1;
```

```
  end do;
```

```
      v21 := 3
```

```
      v22 := 7
```

```
      v23 := 31
```

```
      v24 := 127
```

```
      v25 := 8191
```

```
      v26 := 131071
```

```
      v27 := 524287
```

```
      v28 := 2147483647
```

```
      v29 := 2305843009213693951
```

```
      v210 := 618970019642690137449562111
```

```
      v211 := 162259276829213363391578010288127
```

```
      v212 := 170141183460469231731687303715884105727
```

```
v213 :=
```

```
68647976601306097149819007990813932172694353001433054093944634591855431833\  
97656052122559640661454554977296311391480858037121987999716643812574028291\  
115057151
```

```
v214 :=
```

```
53113799281676709868958820655246862732959311772703192319944413820040355986\  
08522427391625022652292856688893294862465010153465793376527072394095199787\  
66587351943831270835393219031728127
```

```
v215 :=
```

```
10407932194664399081925240327364085538615262247266704805319112350403608059\  
67336029801223944173232418484242161395428100779138356624832346490813990660\  
56773207629241295093892203457731833496615835504729594205476898112116936771\  
47548478866962501384438260291732348885311160828538416585028255604666224831\  
89091880184706822220314052102669843548873295802887805086973618690071472071\  
0555703168729087
```

(2)

```
> v2[1..10]
```

```
[3, 7, 31, 127, 8191, 131071, 524287, 2147483647, 2305843009213693951,  
618970019642690137449562111]
```

(3)

```
>
```