Vishal Arul* (varul.math@gmail.com). Torsion points on curves of the form
\( y^n = x^d + 1 \). Preliminary report.

We classify torsion points on the curve \( y^n = x^d + 1 \) over \( \mathbb{C} \), where \( n \) and \( d \) are coprime and satisfy \( n, d \geq 2 \). When \( n + d \geq 8 \), we show that the only torsion points on this curve are: (i) those whose \( x \)-coordinate is zero, (ii) those whose \( y \)-coordinate is zero, (iii) the point at infinity. When \( n + d = 7 \), there are more torsion points and we classify them all. (Received September 10, 2019)