

Class Practice

Design PDA for the following languages.

- i. $\{w \mid w = x^m y^n \text{ where } m=2n\}$, Consider $\Sigma = \{x, y\}$
- ii. $\{w \mid w = x^m y^n \text{ where } n=2m\}$, Consider $\Sigma = \{x, y\}$
- iii. $\{w \mid w = x^i y^j z^k \text{ where } i+j=k\}$, Consider $\Sigma = \{x, y, z\}$
- iv. $\{w \mid w = x^i y^j z^k \text{ where } i+k=j\}$, Consider $\Sigma = \{x, y, z\}$
- v. $\{w \mid w = (x, y)^* \text{ where } x=y\}$, Consider $\Sigma = \{x, y\}$