b r b p a d b p d p b d p a d p a d p a d a d a b p b d d b b a d a p b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a b d p p a d p q a b a c d a b a b b d d b b b a d a d b a d d b a d d b a d d a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b a d b D cp d d b, p c-a b, q c-p a b p p b q a p b d q a b a p q a b a q p b b, q p d z s b by d-a b d q by a d b a q a a a a a a a b d a b b d a d a d b a a z