Original Data Type (a)	Convert to	Type Casting	Description
signed, std_logic_vector	unsigned	unsigned(a)	to_unsigned(10, 5): convert 10 into 5 bit unsigned i.e. 01010
unsigned, std_logic_vector	signed	signed(a)	
signed, unsigned	std_logic_vector	std_logic_vector(a)	
signed, unsigned	integer	to_integer(a)	
integer	signed	to_signed(a, size)	
natural	unsigned	to_unsigned(a, size)	