DGA Name	Inputs	Outputs	Summary with Steps
zodiac_sign_dga(seed, domain_count, min_length, max_length, char_count=15)	seed (int), domain_count (int), min_length (int), max_length (int), char_count (int, optional)	List of domains (str)	1. Define days1, month1, and tlds lists 2. Define zodiac_sign and generate_domain helper functions 3. Seed the random number generator with the provided seed 4. Loop domain_count times: a. Generate a random domain length between min_length and max_length b. Choose a random day from days1 and a random month from month1 c. Call generate_domain with day, month, and char_count to get the domain name d. Choose a random TLD from tlds e. Construct the full domain with 'www.' prefix, domain name, and TLD f. Append the constructed domain to the domains list 5. Return the list of generated domains
time_based_dga(count, min_length, max_length)	count (int), min_length (int), max_length (int)	List of domains (str)	1. Calculate a random number of days to add or subtract from current date 2. Generate a random length between min_length and max_length 3. Format the offset date and truncate/pad to match the length 4. Construct domain with 'www.' prefix, formatted date, and TLD 5. Repeat for count
seed_based_dga(seed, count, min_length, max_length)	seed (str), count (int), min_length (int), max_length (int)	List of domains (str)	1. Generate a random length between min_length and max_length 2. Hash the seed using MD5 and truncate/pad to match the length 3. Construct domain with 'www.' prefix, hashed seed, and TLD 4. Update the seed with the hashed value for next iteration 5. Repeat for count
dictionary_based_dga(count, min_length, max_length)	count (int), min_length (int), max_length (int)	List of domains (str)	1. Generate a random length between min_length and max_length 2. Select words from the dictionary until the desired length is reached 3. Combine the selected words to form the domain name 4. Construct domain with 'www.' prefix, domain name, and TLD 5. Repeat for count
prng_based_dga(seed, count, min_length, max_length)	seed (int), count (int), min_length (int), max_length (int)	List of domains (str)	1. Seed the random number generator with the provided seed 2. Generate a random length between min_length and max_length 3. Generate the domain name by selecting random characters 4. Construct domain with 'www.' prefix, domain name, and TLD 5. Repeat for count
arithmetic_based_dga(seed, count, min_length, max_length)	seed (int), count (int), min_length (int), max_length (int)	List of domains (str)	1. Generate a random number to add to the seed 2. Calculate the result by adding the seed and random number 3. Convert the result to a string 4. Generate a random length between min_length and max_length 5. Truncate or pad the string to match the length 6. Construct domain with 'www.' prefix, string, and TLD 7. Repeat for count
permutation_based_dga(base_domain, count, min_length, max_length)	base_domain (str), count (int), min_length (int), max_length (int)	List of domains (str)	1. Extract characters from the base domain 2. Generate all possible permutations of the characters 3. Shuffle the permutations randomly 4. Generate a random length between min_length and max_length 5. Join the characters of the current permutation to form the domain name 6. Truncate or pad the domain name to match the length 7. Construct domain with 'www.' prefix, domain name, and TLD 8. Repeat for count
fibonacci_based_dga(count, min_length, max_length)	count (int), min_length (int), max_length (int)	List of domains (str)	1. Initialize Fibonacci sequence with 0 and 1 2. Get the current Fibonacci number as an index 3. Generate the domain name using characters at specific indices 4. Generate a random length between min_length and max_length 5. Truncate or pad the domain name to match the length 6. Construct domain with 'www.' prefix, domain name, and TLD 7. Update the Fibonacci sequence for next iteration 8. Repeat for count
base32_base64_dga(seed, count, min_length, max_length, encoding_type)	seed (str), count (int), min_length (int), max_length (int), encoding_type (str)	List of domains (str)	1. Encode the seed using the selected encoding type (base32 or base64) 2. Generate a random number between 1000 and 9999 3. Select a random TLD 4. Generate the domain name by combining the encoded seed, random number, and TLD 5. Generate a random length between min_length and max_length 6. Truncate or pad the domain name to match the length 7. Construct domain with 'www.' prefix, domain name, and TLD 8. Reverse the seed for the next iteration 9. Repeat for count
wordlist_dga(count, min_length, max_length)	count (int), min_length (int), max_length (int)	List of domains (str)	1. Generate words from the wordlist until the desired length is reached 2. Select a random TLD 3. Combine the words and TLD to create the domain 4. Repeat for count
vowel_consonant_dga(count, min_length, max_length)	count (int), min_length (int), max_length (int)	List of domains (str)	1. Generate a random length between min_length and max_length 2. Generate the domain name by alternating between vowels and consonants 3. Select a random TLD 4. Construct domain with 'www.' prefix, domain name, and TLD 5. Repeat for count
morse_code_dga(count, min_length, max_length)	count (int), min_length (int), max_length (int)	List of domains (str)	1. Generate a random length between min_length and max_length 2. Generate the domain name using Morse code sequences 3. Select a random TLD