PRG FUNCTIONS:

1. hc-

Function to get hardcore predicate bit using $\operatorname{Goldreich-Levin}$ Theorem

Parameters	Datatype	Description
x	str	Input of one-way function

Return:

(str): 1 bit hardcore predicate of x

Called by:

• PRG

Caller of:

None

2. owf-

One-way function with candidate as Discrete Log Problem

Parameters	Datatype	Description
х	int	Input of one-way function
g	int	Generator
р	int	Prime

Return:

(int): Dlp function output

Called by:

- PRG
- fixedLengthHash

Caller of:

None

3. PRG-

Function to generate pseudo-random output from a seed

Parameters	Datatype	Description
seed	str	Binary input seed
1	int	Length to which to expand
g	int	Generator
р	int	Prime

Return:

(str): pseudo-randomly generated number of 1 length ${\bf Called\ by:}$

• PRF

Caller of:

• hc