

Solved Questions and Answers

Q1: What is the primary purpose of a worm in malicious code?

A: To propagate itself across networks and consume resources.

Q2: What is the primary purpose of a honeypot in network security?

A: To detect and deflect unauthorized access attempts.

Q3: What is the primary purpose of a man-in-the-middle (MITM) attack?

A: To intercept and manipulate communication between two parties.

Q4: What is the primary function of a Web Application Firewall (WAF)?

A: To protect web applications by executing HTTP/HTTPS security policies.

Q5: Which of the following is a common method to prevent phishing attacks?

A: Educating users about suspicious links and websites.

Q6: Which of the following is a common method to prevent unauthorized login attempts?

A: Using strong passwords.

Q7: Which of the following is a common defense measure against DDoS attacks?

A: Deploying firewalls.

Q8: What is the primary purpose of a Distributed Denial of Service (DDoS) attack?

A: To exhaust network bandwidth and server resources.

Q9: How to determine if a number is a Limited Factor Number?

A: A number is a Limited Factor Number if it only has prime factors 2, 3, or 5.

- Keep dividing the number by 2, 3, or 5 as much as possible.
- If the result is 1, return True; otherwise, return False.

Python Implementation:

```
def is_limited_factor_number(x):
```

```
    if x <= 0: return False
```

```
    if x == 1: return True
```

```
    for factor in [2, 3, 5]:
```

```
        while x % factor == 0:
```

```
            x //= factor
```

```
    return x == 1
```

Example Usage:

```
print(is_limited_factor_number(6)) # True  
print(is_limited_factor_number(14)) # False
```