

Encryption and decryption:

```
def encrypt_word(word):
    result = []

    for char in word:
        ascii_value = ord(char)
        modified_ascii = ascii_value + 3
        binary_value = bin(modified_ascii)[2:].zfill(8)

        first_half = binary_value[:4]
        second_half = binary_value[4:]

        if first_half.count('1') % 2 == 1:
            first_half = '1' + first_half
        else:
            first_half = '0' + first_half

        if second_half.count('1') % 2 == 1:
            second_half = '0' + second_half
        else:
            second_half = '1' + second_half

        result.append(first_half + second_half)

    return ''.join(result)

def decrypt_word(encrypted_bits):
    original_word = []

    for i in range(0, len(encrypted_bits), 10):
        encrypted_char = encrypted_bits[i:i+10]

        first_half = encrypted_char[:5]
        second_half = encrypted_char[5:]

        first_half = first_half[1:]
        second_half = second_half[1:]

        original_binary = first_half + second_half
        ascii_value = int(original_binary, 2)
        original_ascii = ascii_value - 3

        original_word.append(chr(original_ascii))

    return ''.join(original_word)

# Example usage
word=str(input("Enter an word:"))
encrypted_bits = encrypt_word(word)
```

```
decrypted_word = decrypt_word(encrypted_bits)
```

```
print("Original Word:", word)
```

```
print("Encrypted Bits:", encrypted_bits)
```

```
print("Decrypted Word:", decrypted_word)
```

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```

```
CricketMatch
```

```
class CricketMatch:
```

```
    def __init__(self):
```

```
        self.total_score = 0
```

```
        self.total_players = 11
```

```
        self.total_balls = 10
```

```
    def process_input(self, input_str):
```

```
        for entry in input_str.split():
```

```
            if 'wk' in entry:
```

```
                self.total_players -= 1
```

```
                print("Player out")
```

```
            elif 'no' in entry:
```

```
                runs = int(''.join(filter(str.isdigit, entry)))
```

```
                self.total_score += runs
```

```
                self.total_balls += 1
```

```
                print(f"No Ball! Added {runs} runs and increased ball count by 1.")
```

```
            elif 'wd' in entry:
```

```
                runs = int(''.join(filter(str.isdigit, entry)))
```

```
                self.total_score += runs
```

```
                print(f"Wide Ball! Added {runs} runs.")
```

```
            else:
```

```
                runs = int(entry)
```

```
                self.total_score += runs
```

```
        self.total_balls -= 1
```

```
        if self.total_balls <= 0 or self.total_players <= 0:
```

```
            print("Match over!")
```

```
            print(self.score_card())
```

```
            return
```

```
    def score_card(self):
```

```
        return f"Total Score: {self.total_score}, Total Players: {self.total_players}, Total Balls: {self.total_balls}"
```

```
match = CricketMatch()
```

```
print("Give the input like 4 wk-wicket wd-wide ")
```

```
input_sequence = str(input("Enter the input sequence"))
```

```
match.process_input(input_sequence)
```

```
print(match.score_card())
```

```
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```