

Programming Assignment-16

Question 1:

Ans.

```
def stutter(word):  
    return f"{word[:2]}... {word[:2]}... {word}?"
```

Examples

```
print(stutter("incredible")) # Output: "in... in... incredible?"  
print(stutter("enthusiastic")) # Output: "en... en... enthusiastic?"  
print(stutter("outstanding")) # Output: "ou... ou... outstanding?"
```

Question 2:

Ans.

```
import math
```

```
def radians_to_degrees(radians):  
    return round(radians * (180 / math.pi), 1)
```

Examples

```
print(radians_to_degrees(1)) # Output: 57.3  
print(radians_to_degrees(20)) # Output: 1145.9  
print(radians_to_degrees(50)) # Output: 2864.8
```

Question 3:

Ans.

```
def is_curzon(num):  
    return (2**num + 1) % (2 * num + 1) == 0
```

Examples

```
print(is_curzon(5)) # Output: True
print(is_curzon(10)) # Output: False
print(is_curzon(14)) # Output: True
```

Question 4:

Ans.

```
import math
```

```
def area_of_hexagon(x):
    return round((3 * math.sqrt(3) * (x ** 2)) / 2, 1)
```

Examples

```
print(area_of_hexagon(1)) # Output: 2.6
print(area_of_hexagon(2)) # Output: 10.4
print(area_of_hexagon(3)) # Output: 23.4
```

Question 5:

Ans.

```
def binary(n):
    return bin(n).replace("0b", "")
```

Examples

```
print(binary(1)) # Output: "1"
print(binary(5)) # Output: "101"
print(binary(10)) # Output: "1010"
```