

Midterm Preparation 2

1. Write a program that asks a person for her height in inches and prints out the height in centimeters.
2. Write a program that prints out all cube numbers between 1 and 100000.
3. Write a program that prints out 20 random integers between 1 and 100 using the random module and the `random.randint(1,100)` function.
4. Modify the previous problem to print out random integers between 1 and 100 until their sum exceeds 5000.
5. Write a function that takes a string as input and returns the same string with all consonants replaced by the symbol "!".
6. Write a function that takes a string as input and returns the number of vowels in the string.
7. Write a function that returns the scrabble value of a string. The value of the letters are in the following table.

| Letter | Points |
|----------------------------|--------|
| e a i o n r t l s u | 1 |
| d g | 2 |
| b c m p | 3 |
| f h v w y | 4 |
| k | 5 |
| j x | 8 |
| q z | 10 |
| everything else | 0 |