**Built in Functions (Library routines)– Programming Concepts**

**Activity 1:**

1. Using the Python IDE, obtain the output for each of the following print statements, and indicate briefly what the predefined function does:

Table

Description automatically generated

1. Is there a difference between the round() function and the int() function? If so, what is the difference?

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**Activity 2:**

**Application Questions: Use the python interpreter to check your work.**

1. Write a line of code that prints the integer portion of the number 21.45

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1. Write code that prompts the user for a floating-point number and prints the smallest integer that is larger than the number the user entered.

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1. Write a line of code that prints a random number between 1 and 6

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A pair of scissors on a rock

Description automatically generated**Activity 3:**

**Make a game of rock, paper scissors against the computer**

**Algorithm**

Tell user to enter rock, paper or scissors

Get the response

Generate a random number from 1 to 3 (1=rock, 2=paper, 3=scissors)

Compare user selection and computer selection

Display who wins.

**Extension Task:**

Write a program that will display all the factors of a number, entered by the user, that are bigger than 1

(e.g. the factors of the number 12 are 6, 4, 3 and 2 because they divide into 12 exactly)

**Hint**

To find out whether a number X is a factor of Y use:

IF Y mod X =0 (there is nothing remaining when Y is divided by X)