**G09:** Find descendants for a given concept

For a concept identifier entered as the input parameter, this query lists all descendants in the hierarchy of the domain. Descendant are concepts have a relationship to the given concept that is defined as hierarchical in the relationship table, and any secondary, tertiary etc. concepts going down in the hierarchy. The resulting output provides the descendant concept details and the minimum and maximum level of separation.

**Sample query:**

SELECT C.concept\_id as descendant\_concept\_id, C.concept\_name as descendant\_concept\_name, C.concept\_code as descendant\_concept\_code, C.concept\_class\_id as descendant\_concept\_class\_id, C.vocabulary\_id, VA.vocabulary\_name, A.min\_levels\_of\_separation, A.max\_levels\_of\_separation

FROM concept\_ancestor A, concept C, vocabulary VA

WHERE A.descendant\_concept\_id = C.concept\_id

AND C.vocabulary\_id = VA.vocabulary\_id

AND A.ancestor\_concept\_id <> A.descendant\_concept\_id

AND A.ancestor\_concept\_id = 192671

AND sysdate BETWEEN valid\_start\_date

AND valid\_end\_date

ORDER BY 5,7;

**Input:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameter** | **Example** | **Mandatory** | **Notes** |
| Concept ID | 192671 | Yes | GI - Gastrointestinal hemorrhage |
| As of date | Sysdate | No | Valid record as of specific date. Current date – sysdate is a default |

**Output:**

|  |  |
| --- | --- |
| **Field** | **Description** |
| Descendant\_Concept\_ID | Unique identifier of the concept related to the descendant concept |
| Descendant\_Concept\_Name | Name of the concept related to the descendant concept |
| Descendant\_Concept\_Code | Concept code of concept related to the descendant concept |
| Descendant\_Concept\_Class | Concept Class of concept related to the descendant concept |
| Vocabulary\_ID | ID of the vocabulary the descendant concept is derived from |
| Vocabulary\_Name; | Name of the vocabulary the descendant concept is derived from |
| Min\_Levels\_of\_Separation | The length of the shortest path between the concept and the descendant |
| Max\_Levels\_of\_Separation | The length of the longest path between the concept and the descendant |

**Sample output record:**

|  |  |
| --- | --- |
| **Field** | **Value** |
| Descendant\_Concept\_ID | 4318535 |
| Descendant\_Concept\_Name | Duodenal haemorrhage |
| Descendant\_Concept\_Code | 95533003 |
| Descendant\_Concept\_Class | Clinical finding |
| Vocabulary\_ID | 1 |
| Vocabulary\_Name | SNOMED-CT |
| Min\_Levels\_of\_Separation | 1 |
| Max\_Levels\_of\_Separation | 1 |