**Algorithms**

**Laboratory Task-4**

**Submission Deadline** – As announced in the class

**Submission Guidelines**-

* Rename the file to your id only. If your id is 18-XXXXX-1, then the file name must be 18-XXXXX-1.docx.
* Must submit within the given deadline in VUES to the section named Lab Tak-2
* Must include resources for all the section named ‘Code’ and ‘Output (screenshot)’ in the table.

|  |
| --- |
| Question-1 – **Implement Coin Changing Problem with Greedy Approach** |
| **Pseudocode**   1. Sort the array of coins in decreasing order. 2. Initialize result as empty. 3. Find the largest denomination that is smaller than current amount. 4. Add found denomination to result. Subtract value of found denomination from amount. 5. If amount becomes 0, then print result. 6. Else repeat steps 3 and 4 for new value of V. |
| **Code** |
| **Output (Screenshot)** |

|  |
| --- |
| Question-2 – **Implement Activity Selection Problem with Greedy Approach** |
| **Pseudocode**  Set i = 0; //pointing at first element  for j = 1 to n-1 do  if start time of j >= finish time of i then  Print j  Set i = j  endif  endfor |
| **Code** |
| **Output (Screenshot)** |

|  |
| --- |
| Question-3 – **Implement Fractional Knapsack Problem with Greedy Approach** |
| **Pseudocode**  Fractional knapsack class 13 |
| **Code** |
| **Output (Screenshot)** |