**PYTHON ASSINGMENT**

Name: ?????

Section: CSE – D

1. Write a program to perform to find and print the maximum among three numbers.

ALGORITHM

* Step 1: Start
* Step 2: Get a, b, c
* Step 3: Check a>b and a>c, then greater print a
* Step 4: Check b>a and b>c, then greater print b
* Step 5: Else print c
* Step 6: Stop

CODE

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1. Write a program to perform the calculations based on the condition given by the user. For example, calculate the salary statement for an employee based on the following conditions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Basic pay*** | ***DA*** | ***HRA*** | ***Special pay*** | ***Loan*** |
| *< 10000* | *25%* | *15%* | *5%* | *500* |
| *>=10000<=50000* | *35%* | *20%* | *10%* | *1000* |
| *>50000* | *50%* | *30%* | *20%* | *1500* |

ALGORITHM

* Step 1: Start
* Step 2: Get basic salary denoted as a
* Step 3: Check the a<10000, then calculate salary = a+(a\*.25)+(a\*.15)+(a\*.05)-500
* Step 4: Check the a>=10000 and a<=50000, then calculate salary = a+(a\*.35)+(a\*.20)+(a\*.10)-1000
* Step 5: Check the a>50000, then calculate salary = a+(a\*.50)+(a\*.30)+(a\*.20)-1500
* Step 6: Else print salary
* Step 7: Stop

CODE

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1. An organization has decided to provide salary hike to its employees based on their job level. Employees can be in job levels 3 , 4 or 5. Hike percentage based on job levels are given below:

| **Job level** | **Hike Percentage (applicable on current salary)** |
| --- | --- |
| 3 | 15 |
| 4 | 7 |
| 5 | 5 |

In case of invalid job level, consider hike percentage to be 0.

Given the current salary and job level, write a python program to find and display the new salary of an employee. Identify the test data and use it to test the program

ALGORITHM

* Step 1: Start
* Step 2: Get salary and job level
* Step 3: Check level == 3, then calculate c = salary + (salary \* 0.15) and print c
* Step 4: Check level == 4, then calculate c = salary + (salary \* 0.07) and print c
* Step 5: Check level == 5, then calculate c = salary + (salary \* 0.05) and print c
* Step 6: Else print salary
* Step 7: Stop

CODE

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1. You have x no. of 5 rupee coins and y no. of 1 rupee coins. You want to purchase an item for amount z. The shopkeeper wants you to provide exact change. You want to pay using minimum number of coins. How many 5 rupee coins and 1 rupee coins will you use? If exact change is not possible then display -1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sample Input** | | | **Expected Output** | |
| **Available Rs. 1 coins** | **Available Rs. 5 notes** | **Amount to be made** | **Rs. 1 coins needed** | **Rs. 5 notes needed** |
| 2 | 4 | 21 | 1 | 4 |
| 11 | 2 | 11 | 1 | 2 |
| 3 | 3 | 19 | -1 | |

ALGORITHM

* Start 1: Start
* Start 2: Get the values of one and five rupee coins
* Step 3: Get the total amount
* Step 4: Calculate d = total // 5
* Step 5: Calculate e = total % 5
* Step 6: Calculate f = (d \* 5) + e
* Step 7: Check total == f, then print total amount,5 rupee and 1 rupee coin needed
* Step 8: Else print -1
* Step 9: Stop

CODE

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