# Assignment 3: Conditional Statement (Advanced)

1.A function f is defined as follows

F(x) = ax 3 – bx 2 + cx – d if x > k

= 0 if x = k

= - ax 3 + bx 2 – cx + d if x < k

Write a program to accept a, b, c, d, k and x. and display the value of f(x).

2. Write a program to read marks from the keyboard and display equivalent grade.

(Use if-else if ladder)

|  |  |
| --- | --- |
| Marks | Grade |
| 100 – 80 | Distinction |
| 60 – 79 | First Class |
| 35 – 59 | Second Class |
| 0 – 35 | Fail |

3. Write programs for the following:

* Take two numbers of float and divide the first number by second and show the result as integer number.
* Take the first number as -VE integer and second as +VE float, divide the first by second and display output as integer number.
* Take the first number as +VE float and second number as -VE integer, divide the first number by second and display output in the float.

5. A cloth showroom has announced the following seasonal discount on the purchase of items.

|  |  |  |
| --- | --- | --- |
| Purchase Amount | Discount | |
| Mill Cloth | Handloom Items |
| 0 – 100 | - | 5.0% |
| 101 – 200 | 5.0 % | 7.5% |
| 201 – 300 | 7.5 % | 10.0% |
| Above 300 | 10.0 % | 15.0% |

Write a program to compute the net amount to be paid by a customer.

6. The commission a life insurance sales woman earns on insurance policy sold is as follows:

|  |  |
| --- | --- |
| Policy Amount (Rs.) | Commission |
| Less or Equal to 10000 | 0.5 % of Policy Amount |
| Between 10000 and 25000 | Rs 50 + 0.6 % of the amount in excess of Rs 10000 |
| Greater or Equal to 25000 | Rs 140 + 0.75 % of the amount in excess of Rs 25000 |

Write a program that reads the amount of insurance sold and output the commission due to the sales woman.