

Level-1

(Cutoff marks: 15)

(Duration: 2 hours)

1 > In a certain code language, if the word UMBRELLA is coded as PZDJXXB and the word SWEATER is coded as LTJBNJJ, then generate a program which accept the input string from user and give its coded form. (5 marks)

Sample output:

Input- HEATING

Output- PJBNRBN

2> Write a program to produce the following output: (5 marks)

ABCDEFGFEDCBA

ABCDEF FEDCBA

ABCDE EDCBA

ABCD DCBA

ABC CBA

AB BA

A A

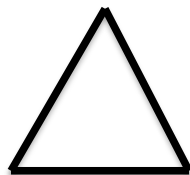
3> Write a program which takes three points (X1 , Y1) , (X2 , y2) and (X3 , y3) and gives the area enclosed by these points. (5 marks)

4> Create a header file named <abhishek.h> which contains two functions known as **read ()** and **write ()** which are used for input & output from console. (5 marks)

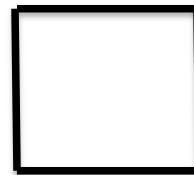
5> Write a program which generates polygon of sides n where n is given by the user. (5 marks)

Sample output:

for n=3



for n=4



6> Write a program which read its source code in the form of some music (the sound should be generated according to the text of the source code). (5 marks)

7> Write a program to sort the numbers in the singly linked list. (5 marks)

8> A man can walk in only four directions ie. east, west, north and south. He travels in these directions in order to reach destination. Write a program which can calculate the exact distance between the source and destination. (5 marks)

Example:-

A man starts from his house and travels a distance of 6 km towards south. Then he turns to east and travel a distance of 8 km and finally he travels 10 km towards north to reach his destination.

Sample input:

6 south

8 east

10 north

Sample output:

8.944271