**Theory Answer**

1. **Answer:**

int n = 10;

int a[n], b[n];

for (int i=0; i<n; i++) {

//Write Code Here

a[i] = a[i] + b[i];

b[i] = a[i] - b[i];

a[i] = a[i] - b[i];

}

1. **Answer:**

char s[] = “banana”;

Six bytes need to store the string s in memory.

1. **Answer:**

 int arr[] = {1, 4, 7, 10, 15, 18, 5, 10};

1. **Answer:**

Abul doesn’t declare a null character in a string. The Null character is used to represent the end of the string in C. The end of the character string is represented ‘\0’.

The correct code is:

char a[10];

a[0] = 'b';

a[1] = 'a';

a[2] = 'n';

a[3] = 'a';

a[4] = 'n';

a[5] = 'a';

a[6] = '\0';

1. **Answer:**

There is no problem when user input “1234567890”. This code run correctly.

1. **Answer:**

400 bytes need an int type array with 100 elements take in memory.

1. **Answer:**

A lexicographical comparison is the kind of comparison generally used to sort words alphabetically in dictionaries

Example:

Two strings can be compared lexicographically using the operators ==, !=, <, <=, >, and >=:

string str1 = "zoo";

string str2 = "cat";

assert(!(str1 < str2));

assert(str > str2);

assert(!(str1 <= str2));

assert(str1 >= str2);

assert(!(str1 == str2));

assert(str1 != str2);

1. **Answer:**

The string length is defined as the no. of characters present in a string.

char \*str = NULL;