PLACEMENTS KEY'S

Coding Challenge #9 (Question)

Day - 5

Write a program in C to check whether a number is a Happy one or not.

A number is said to be happy if it yields 1 when replaced by the sum of squares of its digits repeatedly. If this process results in an endless cycle of numbers more than 3, then the number will be an unhappy number.

Sample input 0:

32

Sample output 0:

Happy number

Explanation:

Number = 32,

$3^2 + 2^2 = 13$,

$1^2 + 3^2 = 10$,

$1^2 + 0^2 = 1$

Sample input 1:

19

Sample output 1:

Unhappy number

Explanation:

Number = 19,

$1^2 + 9^2 = 82$,

$8^2 + 2^2 = 68$,

$6^2 + 8^2 = 100$,

$1^2 + 0^2 + 0^2 = 1$

19 is not a happy number because the number of cycles exceeded 3.

PLACEMENTS KEY'S

Coding Challenge #9 (Question contd.)

Day - 5

Complete the following code satisfying all the test cases:

```
#include<stdio.h>
#include<math.h>
Int  main()
{
        int i,j,num,temp,sum=0;
        printf("Enter number\n");
        scanf("%d",&num);
       /*Complete the code*/
}
```

PLACEMENTS KEY'S

Coding Challenge #10 (Question)

Day - 5

Akash wants to check the whether he can count the number of vowels, consonants, digits, white spaces in a sentence that he is going to enter?

Sample Input 0:

Placement Key

Sample Output 0:

Vowels : 4

Consonants : 8

Digits : 0

White Spaces : 1

Sample Input 1:

Code Challenge3

Sample Output 1:

Vowels : 5

Consonants : 8

Digits : 1

White Spaces : 2

PLACEMENTS KEY'S

Coding Challenge #10 (Question contd.)

Day - 5

Complete the following code:

```
#include <stdio.h>
int main()
{
        char line[1000];
        int vowels=0,consonant=0,digit=0,space=0;
       /*Complete the code*/
}
```