

JOY OF CODING

Day 1

Q 1. Baby Sanvi is given lot of homework during her vacation. Surprisingly she is happy completing them. Her Monday's homework is giving her some discomfort. A long sentence is given, and she is supposed to separate vowels and consonants. Say for example. If the sentence is *friend, can you help me to do this homework?* The answer expected is

vowels are: *ieaoueeooioeo*

consonants are: *frnd, cn y hlp m t d ths hm wrk?*

The sentence may contain upper case as well.

Write a code and bring **JOY** on Sanvi's face

Q 2. Rocky's gold locker has a very special key combination which is known only to him and Vanaram. The key is so dynamic that it changes every now and then. The way to decode the key is by knowing the number of ones in it.

Say if the key is

32 then its decoded as 1,

48 then its decoded as 2

128 then its decoded as 1

100 then its decoded as 3

Wondering ??? its number of 1's in binary equivalent of the key.

You want all the gold in Rocky's ship and lead a **JOY**ous life? **Code** it and **Crack** it.

Q 3. Debug the following code

```
int main()
{
    int ptr=&b;
    int b;
    int *pptr=&ptr;
    printf("the value of b is %d", b);
    printf("the value of b is%d", *[ptr]);
    printf("the value of b is%d", *pptr);
    return 0;
}
```

```
int main()
{
    int a =20;
    float b=20.2
    void *ptr =&a;
    printf("the value of a is %d", *ptr);
    ptr=&b;
    printf("the value of b is %d", *ptr);
}
```