

Solution Lab 06

Task 0: Run following program and understand working for next tasks. This program is generating 5 random numbers in range 0 to 99 and printing the number and its square.

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

int main(){
    srand(time(0));
    int i, x;
    for (i=1;i<=5;i++){
        x = rand() % 100;
        printf ("Square of %d is %d\n", x, x*x);
    }
    return 0;
}
```

Task1: Write a program (using a for loop) that generates 5 integers from the user and print whether the number is even or odd. See test run for further understanding:

```
int i=1, n;
for (i=1;i<=5;i++){
    printf ("Enter Number:")
    scanf("%d",n);
    if (n%2 == 0)
        printf("%d is even\n", n);
    else
        printf("%d is odd\n", n);
}
```

```
Enter number: 25
25 is odd
Enter a number: 10
10 is even
Enter a number: 36
36 is even
Enter a number: 49
49 is odd
Enter a number: 60
60 is even
```

Task2: Write a program that generates 10 capital characters at random, check and print whether the character is vowel or consonant. See Test Run:

```
char c;int i;
for (i=1;i<=10;i++){
    c = rand() % 26 + 'A';
    if (c=='A' || c=='E' || c=='I' || c=='O' || c=='U')
        printf("%c is vowel\n", c);
    else
        printf("%c is consonent\n", c);
}
```

```
D is consonant
U is vowel
M is consonant
...
```

Task3: Write a program to run loop 5 times, generate two numbers randomly in each iteration and print them in ascending order, see test run:

```
int I, n1, n2;
for (i=1;i<=5;i++){
    n1 = rand();    n2 = rand();
    if (n1 < n2)
        printf("%d %d\n", n1, n2);
    else
        printf("%d %d\n", n2, n1);
}
```

```
37 45
23 89
19 78
20 65
54 83
```

[END OF LAB :) :)]