

Assignment - 7

```
1. int main() {  
    int prev = 1, cur = 1, n, next = 0;  
    scanf("%d", &n);  
    printf("%d %d", prev, cur);  
    for (int i = 2; i < n; i++) {  
        next = prev + cur;  
        prev = cur;  
        cur = next;  
    }  
    printf("Your number is %d", cur);  
    return 0;  
}
```

```
2. int main() {  
    int prev = 0, cur = 1, n, next = 0;  
    scanf("%d", &n);  
    printf("%d", prev);  
    for (int i = 0; i < n - 1; i++) {  
        next = prev + cur;  
        printf("%d", next);  
        prev = cur;  
        cur = next;  
    }  
    return 0;  
}
```

```
3. int main() {  
    int prev = 0, cur = 1, n, m, next = 0;  
    scanf("%d", &n);  
    scanf("%d", &m);  
    for (int i = 0; i < n - 1; i++) {  
        next = prev + cur;  
        if (m == next) {  
            printf("found %d", m);  
            break;  
        }  
    }
```

```
    prev = cur;  
    next cur = next;  
}  
return 0;  
}
```

```
4. int main() {  
    int a, b, min, hcf, i;  
    min = a < b ? a : b;  
    scanf("%d %d", &a, &b);  
    for (i = 1; i <= min; i++) {  
        if ((a % i == 0) && (b % i == 0))  
            hcf = i;  
    }
```

```
    printf("HCF is %d", hcf);  
    return 0;  
}
```

```
5. int main() {  
    int a = 2, b = 3, hcf = 1, i;  
    for (i = 1; i <= a; i++) {  
        if ((a % i == 0) && (b % i == 0))  
            hcf = i;  
    }
```

```
    if (hcf == 1)  
        printf("Co-prime");  
    else  
        printf("not co-prime");  
    return 0;  
}
```

```

6, int main() {
    int i, n, flag = 0;
    for (n = 1; n <= 100; n++) {
        flag = 0;
        for (i = 2; i <= n/2; i++) {
            if (n % i == 0)
                flag = 1;
        }
        if (flag == 0)
            printf("%d", n);
    }
    return 0;
}

```

```

int main() {
    int a, b, i, n, flag = 0;
    scanf("%d %d", &a, &b);
    for (n = a; n <= b; n++) {
        flag = 0;
        for (i = 2; i <= n/2; i++) {
            if (n % i == 0)
                flag = 1;
        }
        if (flag == 0)
            printf("%d", n);
    }
    return 0;
}

```

```

int main() {
    int a, i, n, flag = 0;
    scanf("%d", &a);
    for (n = a; n <= a/2; n++) {
        flag = 0;
        for (i = 2; i <= n/2; i++) {
            if (n % i == 0)
                flag = 1;
        }
    }
}

```

```

if (flag == 0) {
    printf("%d", n);
    break;
}
}
return 0;
}

```

```

9, int main() {
    int i, rem, a, sum = 0; int n = a;
    do {
        rem = a % 10;
        a = a / 10;
        sum += (rem * rem * rem);
    } while (a != 0);
    if (sum == n)
        printf("%d", n);
    return 0;
}

```

```

10, int main() {
    int i, rem, a, n, sum = 0;
    for (i = 0; i <= 1000; i++) {
        a = i;
        n = a; sum = 0;
        do {
            rem = a % 10;
            a = a / 10;
            sum = sum + (rem * rem * rem);
        } while (a != 0);
        if (sum == n)
            printf("%d", n);
    }
    return 0;
}

```