

Assignment 7

1. #include <stdio.h>

int main()

{

int m, i, a=-1, b=1, c;
printf("Enter a number\n");
scanf("%d", &m);

for(i=1; i<=m; i++)

{

c = a + b

printf("%d", c);

a = b;

b = c;

}

}

2. #include <stdio.h>

int main()

{ int m, i, a=-1, b=1, c;
printf("Enter a number\n");
scanf("%d", &m);

for(i=1; i<=m; i++)

{

c = a + b;

a = b;

b = c;

}

printf("%d", c);

}

4. #include <stdio.h>
int main()

{

 int a, b, i, hcf; // hcf = 1, min
 printf("Enter two numbers");
 scanf("%d %d", &a, &b);
 min = a < b ? a : b;

 for (i=2; i<=a || i<=b; i++)

{

 if (a % i == 0 && b % i == 0)

{

 hcf = i;

}

}

 printf("HCF = %d", hcf);

}

5. #include <stdio.h>

int main()

{

 int a, b, i, hcf = 1, min;

 printf("Enter two numbers");

 scanf("%d %d", &a, &b);

 min = a < b ? a : b;

 for (i=1; i<=min; i++)

{

 if (a % i == 0 && b % i == 0)

{

 hcf = i;

}

}

```
if ( hcf == 1 )
    printf ("coprime");
else
    printf ("not coprime");
```

3. 98 - #include <stdio.h>
int main()

```
{  
int n, temp, r, sum = 0;  
printf ("Enter a number");  
scanf ("%d", &n);  
temp = n;
```

```
while (n > 0)  
{
```

```
    r = n % 10;
```

```
    sum = sum + (r * r * r);
```

```
    n = n / 10;
```

```
}
```

```
if (sum == temp)
    printf ("Armstrong number");
```

```
else
```

```
    printf ("Not Armstrong Number");
```

```
3
```

As-7 Q3 #include <stdio.h>

int main()

{

int i, m, current = 0, prev = 1, next = 0;
printf("Enter a number");
scanf("%d", &m);

for(i=1; i<=m; i++)

{

next = current + prev;

prev = current;

current = next;

if(next == m)

{ printf("Found"); }

if(next > m)

print if(next == m)

{

printf("Found");

break;

}

if(next > m)

{

printf("Not Found");

break;

}

}

3

As-7 Qn-6- #include <stdio.h>
int main()

{ int i, n, flag = 0;

for (i = 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);

}

}

As-7 Qn-7 #include <stdio.h>
int main()

{

int i, a, b, flag = 0; n;

scanf("Enter two Numbers");

scanf("%d %d", &a, &b);

for (n = a; n <= b; n++)

{

flag = 0;

for (i = 2; i <= n/2; i++)

{

if (flag == 1)

if ($n \% i == 0$)

flag = 1;

} if (flag == 0)

printf("%.d", n);

}

As-7, Qn-8 #include <stdio.h>

int main()

{

int n, i, flag = 0;

printf("Enter a number");

scanf(" %.d", &x);

for (n = x; i < n + 1; i++)

{

flag = 0;

for (i = 2; i <= n / 2; i++)

{

if (n % i == 0)

flag = 1;

}

if (flag == 0)

{ printf(" %.d", n); }

} break;

}