

## S2 Supplementary Exercise – Programming Answer

### Question 1

Output 1

Enter n = 1  
3,

Output 2

Enter n = 30  
3, 9, 27, 81,

### Question 2

Output 1

Enter i = 4  
10

Output 2

Enter i = 15  
120

### Question 3

```
int a, b, x;

cout << "Enter a = ";

cin >> a;

cout << "Enter b = ";

cin >> b;

if(a%2==0)

    x = a;

else

    x = a+1;

while ( x<=b ){

    cout << x << ", ";

    x = x+2;

}
```

#### Question 4

```
int x, y, ans;

cout << "Enter x = ";

cin >> x;

ans = 1;

while ( x>0 ) {

    ans = ans*2;

    x = x-1;

}

cout << ans << endl;
```

#### Question 5

```
int x, y, n;

cout << "Enter n = ";

cin >> n;

x = 0;

while ( x<=n ) {

    y = 0;

    while( y<=n-x ) {

        cout << y << "\\t";

        y = y + 1;

    }

    x = x + 1;

    cout << endl;

}
```