**Assignment - 3**

**1. What do these loops print?**

**for(i = 0; i < 10; i = i + 2)**

**printf("%d\n", i);**

**for(i = 100; i >= 0; i = i - 7)**

**printf("%d\n", i);**

**for(i = 1; i <= 10; i = i + 1)**

**printf("%d\n", i);**

**for(i = 2; i < 100; i = i \* 2)**

**printf("%d\n", i);**

These loops will print undeclared error if i was not declared beforehand. If i was declared, they would give the following:

* + 1. 0

2

4

6

8

* + 1. 100

93

86

79

72

65

58

51

44

37

30

23

16

9

2

* + 1. 1

2

3

4

5

6

7

8

9

10

* + 1. 2

4

8

16

32

64

**2. Write a program to print this triangle:**

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**\*\***

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#include <stdio.h>

void main()

{

int i, j, rows = 10;

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

{

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

{

printf ("\* ");

}

printf ("\n");

}

}

**3. What would this code print?**

**int i;**

**for(i = 0; i < 3; i = i + 1)**

**printf("a\n");**

**printf("b\n");**

**printf("c\n");**

a

a

a

b

c

**4. Write a program to print the following Sequence**

**2**

**4**

**6**

**8**

**10**

#include<stdio.h>

int main()

{

for(int i=2; i<12; i=i+2)

printf("%d\n", i);

return 0;

}

**5. Write a program to swap the values of two variables.**

#include<stdio.h>

int main()

{

int a=2;

int b=3;

printf("a is %d and b is %d \n", a, b);

int temp = b;

b = a;

a = temp;

printf("a is %d and b is %d \n", a, b);

return 0;

}