Assignment - 12 A Job Ready Bootcamp in C++, DSA and IOT MySirG

Recursion in C Language

2. Write a recursive function to print first N natural numbers in reverse order

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

printf("%d",n%10);

print(n/10);

}

}

int main()

{

int n;

printf("Enter the number: ");

scanf("%d",&n);

print(n);

return 0;

}

1. Write a recursive function to print first N natural numbers

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

printf("%d",n%10);

print(n/10);

}

}

int main()

{

int n;

printf("Enter the number: ");

scanf("%d",&n);

print(n);

return 0;

}

3. Write a recursive function to print first N odd natural numbers

#include <stdio.h>

void naturalNum(int n)

{

if (n > 0)

{

naturalNum(n - 1);

printf("%d ", 2\*n-1);

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

naturalNum(n);

return 0;

}

4. Write a recursive function to print first N odd natural numbers in reverse order

#include <stdio.h>

void naturalNum(int n)

{

if (n > 0)

{

naturalNum(n - 1);

printf("%d ", 2\*n-1);

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

naturalNum(n);

return 0;

}

5. Write a recursive function to print first N even natural numbers

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

print(n - 1);

printf("%d ", 2\*n);

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

print(n);

return 0;

}

6. Write a recursive function to print first N even natural numbers in reverse order

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

printf("%d ", 2\*n);

print(n - 1);

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

print(n);

return 0;

}

7. Write a recursive function to print squares of first N natural numbers

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

print(n - 1);

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

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

print(n);

return 0;

}

8. Write a recursive function to print binary of a given decimal number

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

print(n/2);

printf("%d",n%2);

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

print(n);

return 0;

}

9. Write a recursive function to print octal of a given decimal number

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

print(n/8);

printf("%d",n%8);

}

}

int main()

{

int n;

printf("Enter the value: ");

scanf("%d",&n);

print(n);

return 0;

}

10. Write a recursive function to print reverse of a given number

#include <stdio.h>

void print(int n)

{

if (n > 0)

{

printf("%d",n%10);

print(n/10);

}

}

int main()

{

int n;

printf("Enter the number: ");

scanf("%d",&n);

print(n);

return 0;

}