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Pseudo code

1. n=6
k = 2 4 8 16 32 64 } values
i = 2 3 4 5 6
k = k * i
i = i + 1

Sol:-

1. n = 6
k = 2 4 12 48 240
i = 2 3 4 5 6
k = k * i
i = i + 1

Sol:- 1440

2. Code will run infinite number of times
--res = res = -1
res++ ⇒ res = 0
0 >= 0 is always true
So, the loops never ends, -1 will be disp
again and again.

. Set value = 1 * 10;
print value

Sol:- 10

. Set Integer value = 10
Set Integer Salary = 0
while (value = 10)
Salary = Salary + 100
display Salary

END while

Sol:- Here value should value = = 10
So, it will give error.

5. input is 25
Repeat while input>0;
if (1 to 12) → *
else if (13 to 24) → **
else if (25 to 30) → ***
input = input - 1

Sol:-
25 to 25 → 1 *** 3 times
13 to 24 ⇒ 12×2 = 24 stars
1 to 12 ⇒ 12×1 = 12 stars
⇒ 12+24+3 ⇒ 39 stars

6. for m = 0 to 14 do
for n = 0 to 14 do
display '#'
end - for
if (m=5) then do
break
end - if
end - for

Sol:- 0, 1, 2, 3, 4, 5 → 6
0 to 14 ⇒ 14×6 ⇒ 90

7. for x = 0 to 8 do
for y = 0 to 6 do
0, 1, 2 → 3
7×3 = 21

8. integer x, y, z
Set x=4, y=3, z=1
if (x >> (z-1) && y << (z+1))
x = x+z
else
y = x << z
end if
print x-y+z

Sol:- x >> (z-1)
4 >> 0 ⇒ 4
y << (z+1)
3 << 2 ⇒ 12
if (4 & 12) → true
then x = x+z
x = 4+1 = 5
x=5, y=3, z=1
print x-y+z ⇒ 5-3+1 ⇒ 3

32 16 8 4 2 1
0 0 0 0 1 1
if we shift 2
8 4 2 1
0 0 1 1 0 0 ⇒ 12

9. n=10
i=5, sum=0
while i<n;
sum = sum+i
i = i+1
end while
write Sum

sum=0
sum+=5 → 5
+6 → 11
+7 = 18
+8 = 26
+9 = 35

6. Read n
i=0
while n-i!=0;
n = n+3
i++
end while

n = n + i
print n
n = 35
i = 0

35 % 10 = 5 → not 0 → go inside loop

n = 38, i = 1 ⇒ 38 % 10 ⇒ 8
n = 41, i = 2 ⇒ 41 % 10 ⇒ 1
n = 44, i = 3 ⇒ 44 % 10 = 4
n = 47, i = 4 ⇒ 47 % 10 = 7
n = 50, i = 5, ⇒ 50 % 10 = 0 → exit loop
n = n + i ⇒ 50 + 5 ⇒ 55

11. n = 26
i = 0
n = n + 5
i++
n = n + i

n % 8 = 0
26 % 8 = 2 → not 0
n = 31, i = 1 ⇒ 31 % 8 = 7
n = 36, i = 2 ⇒ 36 % 8 = 4
n = 41, i = 3 ⇒ 41 % 8 = 1
n = 46, i = 4 ⇒ 46 % 8 = 6
n = 51, i = 5 ⇒ 51 % 8 = 3
n = 56, i = 6 ⇒ 56 % 8 = 0

⇒ n = n + i ⇒ 56 + 6 ⇒ 62

12. a = 5, b = 5
a^b function (a, b-1)
⇒ 15625

13. f = 102, S = 115, 120 = b sum = f + a + b ⇒ 115 +
⇒

14. Array index out of bounds Error.

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15. i=5
n=7
f = fun(5,7)
if (x<=0)
return y;
else
return(fun(x-1,y-1))

5,7
4,6
3,5
2,4
1,3
0,2 → x<=0 ⇒ 2

16. n=5, k, f1, f2, f
if (n<2)
return n;
else
f1=f2=1
f=f1+f2; f=2 ⇒ 3
f2=f1; f2=1 ⇒ 3
f1=f; f1=2 ⇒ 5

17. ~~declaring=1~~ #
m=2, b=1 # limit = 10
m=2, n=1 a = m²-n² = 2²-1² ⇒ 4-1 ⇒ 3
b = 2mn ⇒ 2(2)(1) = 4
c = m*m+n*n ⇒ m²+n² ⇒ 4+1 = 5
m=3, n=1 ; a = 9-1 ⇒ 8
b = 6
c = 9+1 ⇒ 10
⇒ 3 4 5
8 6 10

18. Sum the elements of array
19. Reverse of a String
20. 5
21. prepinsta prime
22. 8
23. 90

0+1=0
1 2 5
⇒ 1

24. 0+1 = 1 j=1
1+2 j=3
3+3 j=6
6+4 j=10
10+5 j=15

25. n=35
n => n+3 => 35+3=38 38+3 => 41 41+3 => 44
i=0+1=1 i=2 i=3
44+3 => 47 47+3 => 50
i=4 i=5
n=50
n1=n-i => 50-5 => 45

26. a=5, b=2, c=1
~~56(a+1)~~ if(a>b+1 a>c+1 c>b)
b=a+1;
else a=b+1;
printf("%d",a+b+c);
a=b+1 => 2+1 => 3
a=3
a+b+c => 3+2+1 => 6

27. 2n + 2* sizeof(int)
Size of int = 2bytes
=> 2n + 2*2 => 2n+4 => Sum of Variable
occupy 2bytes ; 1 Variable will occupy 2bytes
So, total 2n+4+2+2 => 2n+8 bytes

28. a=8 & b=9
fun(a=8, b=9) -> 1st a<b is true
fun(a=9, b=8) a<b is false it will return a+fun(
=> 9+fun(9,7))
fun(a=9, b=7) a<b is false it will return 9+
it will continue until a>=b=0
the 1st call => fun(8,9) will be returned by
fun(9,8) => 72

29. m=9, n=6;
m = m+1; 10 = m
n = n-1; 6-1 ⇒ 5
m = m+n ⇒ 10+5 ⇒ 15
if (m>n) 15>5 false true
print n
else
print n ⇒ 15

30. f=6, g=9 & set sum=0
if (g>f)
for (n=f; n<g; n=n+1)
sum = sum+n;
end for loop
print sum
else
print error message

(a>6) true n=f
1. n=6, sum=sum+n=0
2. n=7, sum=6+7=13
3. n=8, sum=13+8=21
n<g ⇒ n<9 n<9 will
So, sum = 21

31. Set k=8
for (each i from 1 to ,) i=1
for (each j from the value of i) j=1
print k+1 k=8 ⇒ k+1 ⇒ 9

32. a=1, b=2
if (a<3 & b<4)
return fun (a+1, b+1)
else
return a+b
end if

1<3 & 2<4 ⇒ true
return fun(2,3)
2<3 & 3<4 ⇒ true
return fun (3,4)
3<3 & 4<4 → false
else → a+b ⇒ 3+4 ⇒

count
0 to 9
print "#"
if (count>6)
continue
print count
End for

⇒ #0#1#2#3#4#5#6###

34. input = 5
i = 2
i <= num/2 ⇒ 5/2 ⇒ 2.5
it will not print anything

35. integer x, y, z;
x = 0, y = 1;
x = y = z = 8;
print x ⇒ 8

Quiz

1. Here p=4, q=6, r=2
p = p+q-r = 7 = 5 . q = p+r-7 = 0
if (p>q) print Hello O/P:- Hello

2. Here n=4 - array element = 1, 2, 3, 4, 5
if (n is equal to 1) then return 0;
else
x = fun (a, n-1)
if (x == a[n-1])
return x;
else return a[n-1]; O/P:- 4

3. Here p=2, q=3
for (int i=0; i<=0; i+=2) {
p = p+q+i;
p = p+q;
q = p-q; O/P:- 5, 15, 39, 99
Print (q); }

4. Static float i = 3)
if (--i) { main(); O/P:- 0.0000
Print (i); }

5. Set the value = (100, 256, 3.3);
Print (get the values);
return 0;
O/P:- 3

6. for (int i=0; i<5; i++){
for (int j=0; j<i; j++){
Print (j);
{print ("\n");}
O/P:- 1 2 3 3 4 5 4 5 6

7. n=13531, res=0
while (n!=0){
res = a%10;
res = (res*10)+res;
n = n/10;
}
O/P:- Palindrome.

8. Static value=5.2;
print (val--);
if (1>5)
O/P:- Infinite loop.

9. a=97, b=97, c=98
if (a>b && a>c){
print(a); }
if (b>a && b>c){
print (b) }
if (c>a && c>b){
print (c);
}
O/P:- 98

10. a=2, b=90
while (b>9){
a = b%2+a;
if (a%2!=0)
{
print (a);
else
print b;
b = b/2;
}
O/P:- 90 3 31

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Quiz

1. x=5, y=10, z=15, p=10, q=20, r=30
a = x+p;
b = y*q;
c = r/z;
print a, b, c;
O/P:- 15 200 2

2. n=3, if (n<0) {
return 0;
if (n<1) { return 1; }
print n;
res (n-1);
O/P:- 3 2 1

3. x=4, y=5, z=6
if (x+y > z)
if (z > y)
if (y > x)
{ print (x)
} else { print (y); }
O/P:- 5

4. x=10, y=15, C=20
if (x > y && y < z)
return y, x, z;
if (y > z && z > x)
return z, y, x
if (z > y && z > x)
return (x, y, z);
O/P:- Runtime Error.

5. i = 11;
if (i % 2 == 0)
return i;
else
return (i-1);
O/P:- 10.

7. The elements in an array should be in the sorted form.

8. x=12, y=10, z=13
x+y > z ? (z)
O/P:- 13.

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9. a=3, b=5, c=1
a = a+b|c|2;
b = a+b|2;
if (a>b)
print prime mark
else
print prime video

O/P:- Prime Video

10. int num[] = [1, 4, 8, 12, 16]
int *a, *b;
a = num;
b = num+2;
i = *a++;
print (i, *a, *b);

O/P:- 4, 8, 1

Quiz

1. x=0, y=1;
for (; y; count <<++x - 2y++ << "\n");
{ x = y++ <=15;
} return 0;

O/P:- Infinite

2. i=i, j;
for (; ;){
i++;
if (i)
j = --i;
if (i<5)
print ("Royal pass" i++)
else
break;
return 0;

O/P:- Royal pass
Royal pass
Royal pass
Royal pass

3. x=4, y=0, z=0;
z = (x++ + ++y + y++ - x++);
print (z)
return 0; O/P:- 5

4. n=50
if (n==0)
return i;
else
return (n-1); O/P:- result:1;

5. n=10;
if (n==0)
return1;
else
return n+(n-1); O/P:- 56

6. x=5, y=4, z=3;
a= x<<+ b=y>>+; c= z<<1+
print (a,b,c) O/P:- 10, 2, 6

7. 16 bytes

8. x=25, y=10
if (x==0)
return y;
else
return (x-1, y+1); O/P:- 35

9. num = 112, temp digit, sum=1;
while (num>0)
{
digit = num%10;
Sum = Sum* digit;
num=num/10;}
Print (sum); O/P:- 2

10. x=2, y=10, z=13
x+y=3 ? print (z) : return z;
O/P:- Error.