**Раздел 16. Вложенные циклы.**

Агишев 16ИС-2

**16.1**

public class Main {  
 public static void main(String[] args)  
 {  
 for (int i=0;i < 4; i++)  
 {  
 for (int j=0; j < 5; j++)  
 {  
 System.*out*.println(i + j);  
 }  
 }  
 }  
}

Ответ:

**0**

**1**

**2**

**3**

**4**

**1**

**2**

**3**

**4**

**5**

**2**

**3**

**4**

**5**

**6**

**3**

**4**

**5**

**6**

**7**

**16.2**

public class Main {  
 public static void main(String[] args)  
 {  
 for (int i=0;i < 4; i++)  
 {  
 for (int j=0; j < i; j++)  
 {  
 System.*out*.println(i\*j);  
 }  
 }  
 }  
}

**Ответ:**

**0**

**0**

**2**

**0**

**3**

**6**

**16.3**

public class Main {  
 public static void main(String[] args)  
 {  
 for (int i=0;i < 4; i++)  
 {  
 int s = 0;  
 for (int j=0; j < i; j++)  
 {  
 s = s + i + j;  
 System.*out*.println(s);  
 }  
 }  
 }  
}

**Ответ:**

**1**

**2**

**5**

**3**

**7**

**12**

**16.4**

**РЕШЕНИЕ В КНИГЕ.**

**16.5**

public class Main {  
 public static void main(String[] args)  
 {  
 for (int i = 1; i< 6; i++)  
 {  
 System.*out*.print(i+": ");  
 for (int j = 10; j < 100; j++) {  
 if (j%(i+1)==0)  
 System.*out*.print(j + " ");  
 }  
 System.*out*.println();  
 }  
 }  
}

**Ответ:**

**1: 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98**

**2: 12 15 18 21 24 27 30 33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99**

**3: 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96**

**4: 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95**

**5: 12 18 24 30 36 42 48 54 60 66 72 78 84 90 96**

**16.6**

**16.7**

**РЕШЕНИЕ В КНИГЕ.**

**16.8**

public class Main {  
 public static void main(String[] args)  
 {  
 int sum = 0;  
 int n = 75;  
 for (int i = 1; i<=n; i++)  
 {  
 System.*out*.print(i+": ");  
 for (int j = 1; j <= i; j++){  
 if (i % j == 0) {  
 System.*out*.print(j + " ");  
 sum += j;  
 }  
 }  
 System.*out*.print("Sum = "+sum);sum=0;  
 System.*out*.println();  
 }  
 }  
}

**Ответ:**

**1: 1 Sum = 1**

**2: 1 2 Sum = 3**

**3: 1 3 Sum = 4**

**4: 1 2 4 Sum = 7**

**5: 1 5 Sum = 6**

**6: 1 2 3 6 Sum = 12**

**7: 1 7 Sum = 8**

**8: 1 2 4 8 Sum = 15**

**9: 1 3 9 Sum = 13**

**10: 1 2 5 10 Sum = 18**

**11: 1 11 Sum = 12**

**12: 1 2 3 4 6 12 Sum = 28**

**13: 1 13 Sum = 14**

**14: 1 2 7 14 Sum = 24**

**15: 1 3 5 15 Sum = 24**

**16: 1 2 4 8 16 Sum = 31**

**17: 1 17 Sum = 18**

**18: 1 2 3 6 9 18 Sum = 39**

**19: 1 19 Sum = 20**

**20: 1 2 4 5 10 20 Sum = 42**

**21: 1 3 7 21 Sum = 32**

**22: 1 2 11 22 Sum = 36**

**23: 1 23 Sum = 24**

**24: 1 2 3 4 6 8 12 24 Sum = 60**

**25: 1 5 25 Sum = 31**

**26: 1 2 13 26 Sum = 42**

**27: 1 3 9 27 Sum = 40**

**28: 1 2 4 7 14 28 Sum = 56**

**29: 1 29 Sum = 30**

**30: 1 2 3 5 6 10 15 30 Sum = 72**

**31: 1 31 Sum = 32**

**32: 1 2 4 8 16 32 Sum = 63**

**33: 1 3 11 33 Sum = 48**

**34: 1 2 17 34 Sum = 54**

**35: 1 5 7 35 Sum = 48**

**36: 1 2 3 4 6 9 12 18 36 Sum = 91**

**37: 1 37 Sum = 38**

**38: 1 2 19 38 Sum = 60**

**39: 1 3 13 39 Sum = 56**

**40: 1 2 4 5 8 10 20 40 Sum = 90**

**41: 1 41 Sum = 42**

**42: 1 2 3 6 7 14 21 42 Sum = 96**

**43: 1 43 Sum = 44**

**44: 1 2 4 11 22 44 Sum = 84**

**45: 1 3 5 9 15 45 Sum = 78**

**46: 1 2 23 46 Sum = 72**

**47: 1 47 Sum = 48**

**48: 1 2 3 4 6 8 12 16 24 48 Sum = 124**

**49: 1 7 49 Sum = 57**

**50: 1 2 5 10 25 50 Sum = 93**

**51: 1 3 17 51 Sum = 72**

**52: 1 2 4 13 26 52 Sum = 98**

**53: 1 53 Sum = 54**

**54: 1 2 3 6 9 18 27 54 Sum = 120**

**55: 1 5 11 55 Sum = 72**

**56: 1 2 4 7 8 14 28 56 Sum = 120**

**57: 1 3 19 57 Sum = 80**

**58: 1 2 29 58 Sum = 90**

**59: 1 59 Sum = 60**

**60: 1 2 3 4 5 6 10 12 15 20 30 60 Sum = 168**

**61: 1 61 Sum = 62**

**62: 1 2 31 62 Sum = 96**

**63: 1 3 7 9 21 63 Sum = 104**

**64: 1 2 4 8 16 32 64 Sum = 127**

**65: 1 5 13 65 Sum = 84**

**66: 1 2 3 6 11 22 33 66 Sum = 144**

**67: 1 67 Sum = 68**

**68: 1 2 4 17 34 68 Sum = 126**

**69: 1 3 23 69 Sum = 96**

**70: 1 2 5 7 10 14 35 70 Sum = 144**

**71: 1 71 Sum = 72**

**72: 1 2 3 4 6 8 9 12 18 24 36 72 Sum = 195**

**73: 1 73 Sum = 74**

**74: 1 2 37 74 Sum = 114**

**75: 1 3 5 15 25 75 Sum = 124**