

Find the smallest positive integer value that cannot be represented as sum of any subset of a given array sorted in ascending order.

```
#include <stdio.h>

int findSmallest(int arr[], int n)
{
    int res = 1;
    for (int i = 0; i < n && arr[i] <= res; i++)
        res = res + arr[i];

    return res;
}

int main()
{
    int arr1[] = { 1, 3, 4, 5 };
    int n1 = sizeof(arr1)/sizeof(arr1[0]);
    printf("output1: %d\n", findSmallest(arr1, n1));

    int arr2[] = { 1, 2, 6, 10, 11, 15 };
    int n2 = sizeof(arr2)/sizeof(arr2[0]);
    printf("output2: %d\n", findSmallest(arr2, n1));
}
```

```

int arr3[] = {1, 1, 1, 1};

int n3 = sizeof(arr3)/sizeof(arr3[0]);

printf("output3: %d\n", findSmallest(arr3, n1));

int arr4[] = {1, 1, 3, 4};

int n4 = sizeof(arr4)/sizeof(arr4[0]);

printf("output4: %d\n", findSmallest(arr4, n1));

return 0;

}

```

The screenshot shows the OnlineGDB online C compiler interface. The left sidebar contains navigation links: 'Welcome, Priyanka Killedar', 'Create New Project', 'My Projects', 'Classroom' (marked as new), 'Learn Programming', 'Programming Questions', and 'Logout'. Below these are social media icons for Facebook and Twitter, and a '39.1K' badge. A section for 'The Ruby Blend Podcast' is also visible, featuring Episode #14 titled 'BridgetownRB, RailsBytes, & ApplLocale' with the tagline 'ada served ethically'. At the bottom of the sidebar are links for 'About', 'FAQ', 'Blog', 'Terms of Use', 'Contact Us', 'GDB Tutorial', 'Credits', and 'Privacy', along with the copyright notice '© 2016 - 2020 GDB Online'.

The main editor area displays a C program named 'main.c' with the following code:

```

6   res = res + arr[i];
7
8   return res;
9 }
10 int main()
11 {
12     int arr1[] = {1, 3, 4, 5};
13     int n1 = sizeof(arr1)/sizeof(arr1[0]);

```

The output window shows the results of the program execution:

```

output1: 2
output2: 4
output3: 5
output4: 10

```

Below the output, a message states: '...Program finished with exit code 0. Press ENTER to exit console.'

The bottom of the image shows a Windows taskbar with the search bar and various application icons. The system tray on the right indicates the language is 'ENG', the time is '4:55 PM', and the date is '6/17/2020'.